INVENTOR SEARCH

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=> fil capl; d que l16
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FILE LAST UPDATED: 27 Feb 2007  (20070227/ED)

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L4  (         1)SEA FILE=CAPLUS ABB=ON  US2003-652745/APPS
L5  (        44)SEA FILE=CAPLUS ABB=ON  SCHASTEEN C?/AU
L6  (     21547)SEA FILE=CAPLUS ABB=ON  WU J?/AU
L7  (         6)SEA FILE=CAPLUS ABB=ON  BUTTIN P?/AU
L8  (         4)SEA FILE=CAPLUS ABB=ON  HILLEBRAND P?/AU
L9  (       594)SEA FILE=CAPLUS ABB=ON  SCOTT F?/AU
L10 (       351)SEA FILE=CAPLUS ABB=ON  VASQUEZ ANON M?/AU OR VASQUEZ M?/AU OR
                ANON M?/AU
L11 (         1)SEA FILE=CAPLUS ABB=ON  L5 AND L6 AND L7 AND L8 AND L9 AND L10

L12 (        31)SEA FILE=REGISTRY ABB=ON  (10043-35-3/BI OR 107-92-6/BI OR
                110-15-6/BI OR 110-17-8/BI OR 110-44-1/BI OR 110-94-1/BI OR
                124-04-9/BI OR 50-21-5/BI OR 583-91-5/BI OR 64-18-6/BI OR
                64-19-7/BI OR 65-85-0/BI OR 666823-60-5/BI OR 666823-61-6/BI
                OR 666823-62-7/BI OR 666823-63-8/BI OR 666823-64-9/BI OR
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                79-14-1/BI OR 87-69-4/BI OR 90-64-2/BI)
L13 (        11)SEA FILE=REGISTRY ABB=ON  L12 AND S7ELS
L14 (       488)SEA FILE=CAPLUS ABB=ON  L13
L15 (        10)SEA FILE=CAPLUS ABB=ON  (L5 OR L6 OR L7 OR L8 OR L9 OR L10)
                AND L14
L16          11 SEA FILE=CAPLUS ABB=ON  (L4 OR L11 OR L15)


=> s l16 or (l16 and l60)
L72         11 L16 OR (L16 AND L60)

=> d ibib ed abs hitstr 1-11
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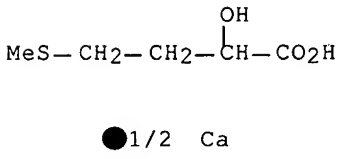
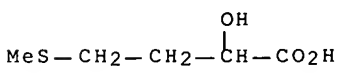
L72 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1342375 CAPLUS Full-text
DOCUMENT NUMBER: 146:83577
TITLE: Purification and decolorization of hydroxymethylthiobutanoic acid complex
INVENTOR(S): Trehy, Michael L.; Blackburn, Thomas F.; Hume, John A.; **Schasteen, Charles S.**
PATENT ASSIGNEE(S): Novus International, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 6pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006287543	A1	20061221	US 2006-413529		20060428
PRIORITY APPLN. INFO.:			US 2005-676589P	P	20050429

ED Entered STN: 22 Dec 2006
AB 2-Hydroxy-4-(methylthio)butanoic acid complex is purified by (a) contacting a 2-hydroxy-4-(methylthio)butanoic acid complex with activated carbon, and (b) removing the activated carbon to yield the purified 2-hydroxy-4-(methylthio)butanoic acid complex.
IT **4857-44-7P**
RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)
(purification and decolorization of hydroxy(methylthio)butanoic acid complexes)
RN 4857-44-7 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, calcium salt (2:1) (9CI) (CA INDEX NAME)



IT **583-91-5P**, 2-Hydroxy-4-(methylthio)-butanoic acid
RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(purification and decolorization of hydroxy(methylthio)butanoic acid complexes)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



L72 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1252835 CAPLUS Full-text

DOCUMENT NUMBER: 146:803
TITLE: Methods and compositions for reducing blood homocysteine levels
INVENTOR(S): Dibner, Julia; **Schasteen, Charles S.**; Vazquez-Anon, Mercedes
PATENT ASSIGNEE(S): Novus International, Inc., USA
SOURCE: PCT Int. Appl., 26pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

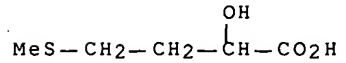
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006128048	A2	20061130	WO 2006-US20596	20060525
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2007010583	A1	20070111	US 2006-441490	20060525
PRIORITY APPLN. INFO.:			US 2005-684549P P	20050525

ED Entered STN: 01 Dec 2006

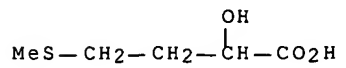
AB The invention provides methods for reducing blood homocysteine levels in mammals, and treating or preventing diseases associated with elevated blood homocysteine levels, such as cardiovascular diseases and cognitive disorders. The invention also provides nutritional and pharmaceutical compns. comprising 2-hydroxy-4-(thiomethyl)-butanoic acid (HMTBA), including esters, analogs, derivs. or complex thereof.

IT **583-91-5 583-91-5D**, chelates and complexes and salts **4857-44-7**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reducing blood homocysteine levels using 2-hydroxy-4-(thiomethyl)-butanoic acid and combination with other vitamins and minerals for treating diseases in subjects not treated for renal insufficiency)

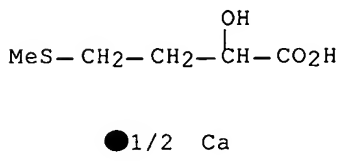
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 4857-44-7 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, calcium salt (2:1) (9CI) (CA INDEX NAME)

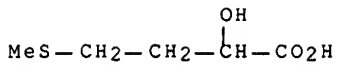


L72 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1200989 CAPLUS Full-text
DOCUMENT NUMBER: 143:439071
TITLE: Basic amino acid - methionine hydroxy analog compositions
INVENTOR(S): Lorbert, Steve; **Schasteen, Charles S.**; Uraizee, Farooq
PATENT ASSIGNEE(S): Novus International, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005250849	A1	20051110	US 2005-119252	20050429
WO 2005107738	A2	20051117	WO 2005-US14693	20050502

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

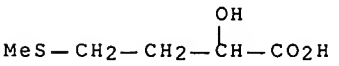
PRIORITY APPLN. INFO.: US 2004-566722P P 20040430
ED Entered STN: 11 Nov 2005
AB Simple, cost-effective and convenient compns. comprising basic amino acids and 2-hydroxy-4-methylthiobutanoic acid (HMBA) are disclosed. The compns. have many uses, including as food supplements for animal and human food.
IT **583-91-5**, 2-Hydroxy-4-methylthiobutanoic acid
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(basic amino acid-methionine hydroxy analog compns.)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



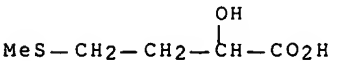
L72 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1050880 CAPLUS Full-text
DOCUMENT NUMBER: 143:325423
TITLE: Palatability enhancers for aquaculture feed
INVENTOR(S): Giesen, Andrew F.; Vazquez-Anon, Mercedes
PATENT ASSIGNEE(S): Novus International, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp., Cont.-in-part of Ser. No. US 2003-652745, filed on 29 Aug 2003 which
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 2005215623	A1	20050929	US 2005-78093		20050311	<--
US 2004175434	A1	20040909	US 2003-652745		20030829	<--
PRIORITY APPLN. INFO.:			US 2003-456673P	P	20030321	
			US 2003-456732P	P	20030321	
			US 2003-465549P	P	20030425	
			US 2003-652745	A2	20030829	<--
			US 2002-407050P	P	20020830	
			US 2003-441384P	P	20030121	
			US 2003-441584P	P	20030121	

OTHER SOURCE(S): MARPAT 143:325423
ED Entered STN: 30 Sep 2005
AB Palatability enhancers for aquaculture feed comprise R1S(CH2)nC(R2)COOH (R1 = C1-4 alkyl; R2 = hydroxy, -OCOR3, or -NHCOR3; R3 = organic acid derivative; and n = 0-2). Thus, Alimet (2-hydroxy-4-(methylthio)butanoic acid) is included in fish feed at the level of 0.07% to increase palatability.
IT **583-91-5**, Alimet **583-91-5D**, 2-Hydroxy-4-(methylthio)butanoic acid, derivs.
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(palatability enhancers for aquaculture feed)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)

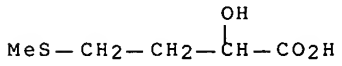


L72 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:71216 CAPLUS Full-text
DOCUMENT NUMBER: 142:154359
TITLE: Methionine recovery processes
INVENTOR(S): Lorbert, Steve; **Wu, Jennifer**; Uraizee, Farooq; **Schasteen, Charles Steven**
PATENT ASSIGNEE(S): Novus Internation, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005007862	A2	20050127	WO 2004-US21756	20040708
WO 2005007862	A3	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005089975	A1	20050428	US 2004-886863	20040708
EP 1656454	A2	20060517	EP 2004-777690	20040708
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

PRIORITY APPLN. INFO.: US 2003-485564P P 20030708
US 2003-485565P P 20030708
WO 2004-US21756 W 20040708

ED Entered STN: 27 Jan 2005
AB The present invention relates to a method of making a methionine preparation, for example for an animal feed additive. The invention also related to methods for increasing the solubility of a methionine preparation
IT **583-91-5**, 2-Hydroxy-4-methylthiobutanoic acid
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methionine recovery processes from fermns.)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



L72 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:780854 CAPLUS Full-text
DOCUMENT NUMBER: 141:276366
TITLE: A process for enzymatically resolving an enantiomeric mixture of α-hydroxy acids

INVENTOR(S): Roy, Arindam; Kapila, Shubhender; Nam, Paul K. S.; Flanigan, Virgil; Lorbert, Stephen J.; **Schasteen, Charles S.**
PATENT ASSIGNEE(S): Novus International Inc., USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004081220	A2	20040923	WO 2004-US7073	20040308
WO 2004081220	A3	20050127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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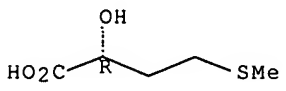
US 2005009158	A1	20050113	US 2004-795790	20040308
PRIORITY APPLN. INFO.:			US 2003-452959P P	20030307
			US 2003-453355P P	20030310

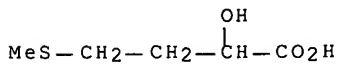
OTHER SOURCE(S): MARPAT 141:276366
ED Entered STN: 24 Sep 2004
AB The present invention relates to a process for resolving an enantiomeric mixture of α-hydroxy acids or derivs. thereof through esterification and subsequent enzymic hydrolysis of the α-hydroxy acids or derivs. The present invention also relates to purified alpha-hydroxy acids or derivs. and methods of use thereof.
IT **39638-34-1DP**, esters
RL: BCP (Biochemical process); CPS (Chemical process); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(enzymic resolution of an enantiomeric mixture of α-hydroxy carboxylic acids)
RN 39638-34-1 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



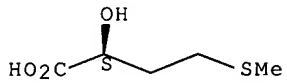
IT **583-91-5DP**, 2-Hydroxy-4-(methylthio)butyric acid, esters
RL: BCP (Biochemical process); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(enzymic resolution of an enantiomeric mixture of α-hydroxy carboxylic

acids)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



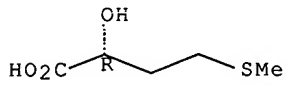
IT **48042-96-2P**
RL: BMF (Bioindustrial manufacture); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(enzymic resolution of an enantiomeric mixture of α-hydroxy carboxylic acids)
RN 48042-96-2 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **39638-34-1P**
RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)
(enzymic resolution of an enantiomeric mixture of α-hydroxy carboxylic acids)
RN 39638-34-1 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L72 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:203593 CAPLUS Full-text
DOCUMENT NUMBER: 140:234733
TITLE: Carboxylic acid microbicides for food, feed and water
INVENTOR(S): **Schasteen, Charles S.; Wu, Jennifer ; Buttin, Pierre; Hillebrand, Pieter ; Scott, Fredrick R.; Vasquez-Anon, Mercedes**
PATENT ASSIGNEE(S): Novus International, LLP, USA; Novus International, Inc.
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004019683	A2	20040311	WO 2003-US27323	20030829
WO 2004019683	A3	20040415		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003268342	A1	20040319	AU 2003-268342	20030829
EP 1531672	A2	20050525	EP 2003-749300	20030829

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003013917	A	20050705	BR 2003-13917	20030829
PRIORITY APPLN. INFO.:			US 2002-407050P	P 20020830
			US 2003-441384P	P 20030121
			US 2003-441584P	P 20030121
			US 2003-456673P	P 20030321
			US 2003-456732P	P 20030321
			US 2003-465549P	P 20030425
			WO 2003-US27323	W 20030829

OTHER SOURCE(S): MARPAT 140:234733

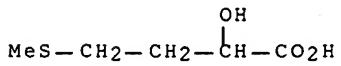
ED Entered STN: 14 Mar 2004

AB Antimicrobial compns. and combinations for food, feed and water comprise carboxylic acids, preferably Alimet.

IT **583-91-5**, Alimet **666823-60-5**, Alimet-lactic acid mixture **666823-61-6**, Alimet-formic acid mixture **666823-62-7**, Alimet-citric acid mixture **666823-63-8**, Alimet-butyric acid mixture **666823-64-9**, Alimet-propionic acid mixture **666823-68-3** **666823-69-4**, Alimet-fumaric acid mixture **666823-70-7**, Alimet-tartaric acid mixture **666823-71-8**, Alimet-sorbic acid mixture **666823-72-9**, Alimet-malic acid mixture
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(carboxylic acid microbicides for food, feed and water)

RN 583-91-5 CAPLUS

CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)

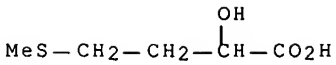


RN 666823-60-5 CAPLUS

CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with 2-hydroxypropanoic acid (9CI) (CA INDEX NAME)

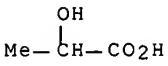
CM 1

CRN 583-91-5
CMF C5 H10 O3 S



CM 2

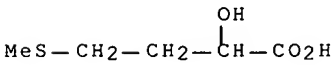
CRN 50-21-5
CMF C3 H6 O3



RN 666823-61-6 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with formic acid (9CI) (CA INDEX NAME)

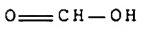
CM 1

CRN 583-91-5
CMF C5 H10 O3 S



CM 2

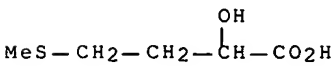
CRN 64-18-6
CMF C H2 O2



RN 666823-62-7 CAPLUS
CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, mixt. with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

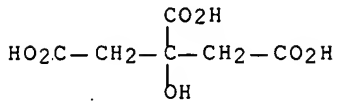
CM 1

CRN 583-91-5
CMF C5 H10 O3 S



CM 2

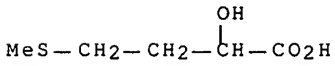
CRN 77-92-9
CMF C6 H8 O7



RN 666823-63-8 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with butanoic acid (9CI) (CA INDEX NAME)

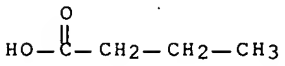
CM 1

CRN 583-91-5
CMF C5 H10 O3 S



CM 2

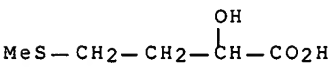
CRN 107-92-6
CMF C4 H8 O2



RN 666823-64-9 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with propanoic acid (9CI) (CA INDEX NAME)

CM 1

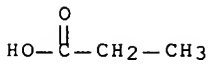
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 79-09-4

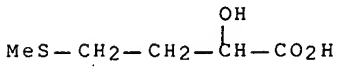
CMF C3 H6 O2



RN 666823-68-3 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with butanoic acid, formic acid and 2-hydroxypropanoic acid (9CI) (CA INDEX NAME)

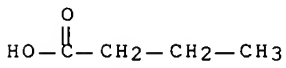
CM 1

CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 107-92-6
CMF C4 H8 O2

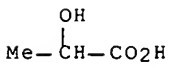


CM 3

CRN 64-18-6
CMF C H2 O2

CM 4

CRN 50-21-5
CMF C3 H6 O3

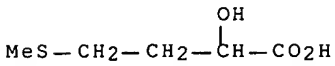


RN 666823-69-4 CAPLUS

CN 2-Butenedioic acid (2E)-, mixt. with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

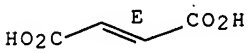
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 110-17-8
CMF C4 H4 O4

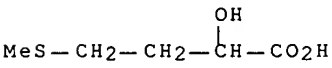
Double bond geometry as shown.



RN 666823-70-7 CAPLUS
CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)-, mixt. with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

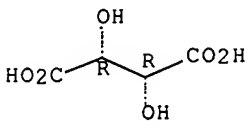
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 87-69-4
CMF C4 H6 O6

Absolute stereochemistry.

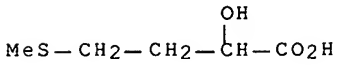


RN 666823-71-8 CAPLUS
CN 2,4-Hexadienoic acid, (2E,4E)-, mixt. with 2-hydroxy-4-

(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

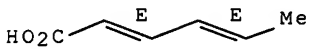
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 110-44-1
CMF C6 H8 O2

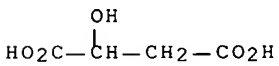
Double bond geometry as shown.



RN 666823-72-9 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)-, mixt. with hydroxybutanedioic acid (9CI) (CA INDEX NAME)

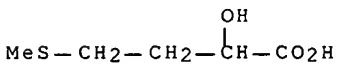
CM 1

CRN 6915-15-7
CMF C4 H6 O5



CM 2

CRN 583-91-5
CMF C5 H10 O3 S



L72 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:590714 CAPLUS Full-text
DOCUMENT NUMBER: 139:148557
TITLE: Protease catalyzed enantioselective oligomerization of α-hydroxy carboxylic acids and α-amino

acids

INVENTOR(S): Lorbert, Stephen J.; **Schasteen, Charles S.**; Nam, Paul K.S.; Forciniti, Daniel; Rajesh, Mathur P.; Kapila, Shubhender

PATENT ASSIGNEE(S): Novus International, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 103 pp., Cont.-in-part of U.S. Ser. No. 699,946.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003143661	A1	20030731	US 2002-136974	20020502
US 6939693	B2	20050906		
US 6605590	B1	20030812	US 2000-699946	20001030
US 2004048347	A1	20040311	US 2003-609825	20030630
US 2006252134	A1	20061109	US 2005-300355	20051214

PRIORITY APPLN. INFO.:

US 1999-162725P	P	19991029
US 2000-699946	A2	20001030
US 2001-288196P	P	20010502
US 2002-136974	A3	20020502
US 2005-219558	A2	20050902

OTHER SOURCE(S): MARPAT 139:148557

ED Entered STN: 01 Aug 2003

AB An enzymic synthesis and composition of oligomers and co-oligomers comprised of α-hydroxy carboxylic acids and α-amino acids or peptides is disclosed. In a preferred embodiment, a α-hydroxy carboxylic acid with a specific chiral configuration is linked by an amide linkage to a α-amino acid specific with a specific chiral configuration or linked by an amide linkage to a peptide made up of α-amino acid monomers having identical chiral configurations. Proteolytic enzymes catalyze oligomerization of the α-hydroxy carboxylic acid and α-amino acid. The degree and distribution of oligomerization varies upon the type and concns. of different reaction mixts. utilized and upon the length of allowed reaction time. The resultant oligomers may be provided to animals such as ruminants as bioavailable amino acid supplements that are resistant to degradation in the rumen and other animals such as swine, poultry and aquatic animals.

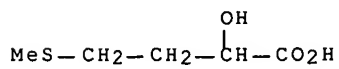
IT **569681-73-8P 569681-74-9P 569681-80-7P**
RL: BPN (Biosynthetic preparation); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(oligomeric; protease catalyzed enantioselective oligomerization of α-hydroxy carboxylic acids and α-amino acids)

RN 569681-73-8 CAPLUS

CN L-Lysine, polymer with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

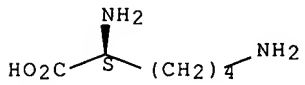
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 56-87-1
CMF C6 H14 N2 O2

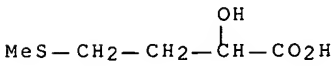
Absolute stereochemistry.



RN 569681-74-9 CAPLUS
CN L-Tyrosine, polymer with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

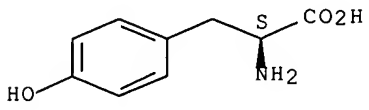
CRN 583-91-5
CMF C5 H10 O3 S



CM 2

CRN 60-18-4
CMF C9 H11 N O3

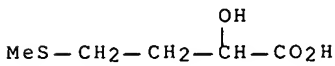
Absolute stereochemistry. Rotation (-).



RN 569681-80-7 CAPLUS
CN L-Tryptophan, polymer with 2-hydroxy-4-(methylthio)butanoic acid (9CI) (CA INDEX NAME)

CM 1

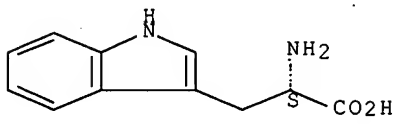
CRN 583-91-5
CMF C5 H10 O3 S



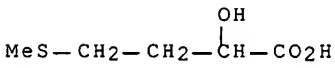
CM 2

CRN 73-22-3
CMF C11 H12 N2 O2

Absolute stereochemistry.



IT **583-91-5D**, 2-Hydroxy-4-(methylthio)butyric acid, and derivs. of
RL: BCP (Biochemical process); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(protease catalyzed enantioselective oligomerization of α-hydroxy carboxylic acids and α-amino acids)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

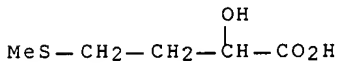
L72 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:227033 CAPLUS Full-text
DOCUMENT NUMBER: 138:385728
TITLE: Enzymatic Synthesis and Characterization of L-Methionine and 2-Hydroxy-4-(methylthio)butanoic Acid (HMB) Co-oligomers
AUTHOR(S): Rajesh, Mathur; Kapila, Shubhen; Nam, Paul; Forciniti, Daniel; Lorbert, Stephen; **Schasteen, Charles**
CORPORATE SOURCE: Center for Environmental Science and Technology and Department of Chemistry, University of Missouri-Rolla, Rolla, MO, 65409-0530, USA
SOURCE: Journal of Agricultural and Food Chemistry (2003), 51(9), 2461-2467
CODEN: JAFCAU; ISSN: 0021-8561
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:385728
ED Entered STN: 25 Mar 2003
AB Oligomers of L-methionine (Met) and its hydroxy analog, 2-hydroxy-4-(methylthio)butanoic acid (DL-HMB), were synthesized with the proteolytic enzyme papain. The Met homooligomers and HMB-Met co-oligomers obtained through the enzymic reactions were subjected to persulfonation and separated with reverse phase liquid chromatog. (RPLC). The separated oligomers were characterized with electrospray ionization-mass spectrometry (ESI-MS). The

oligomers were also characterized with matrix-assisted laser desorption ionization time of flight mass spectrometry (MALDI-TOF-MS). The results showed that co-oligomers were predominantly composed of 4-8 Met residues and one HMB residue. The data also suggest that in the co-oligomers, HMB is attached at the N-terminal end of the oligopeptide chain.

IT **583-91-5**, Butanoic acid, 2-hydroxy-4-(methylthio)-
RL: RCT (Reactant); RACT (Reactant or reagent)
(enzymic preparation and mass spectral anal. of methionine and hydroxy(methylthio)butanoic acid co-oligomers)

RN 583-91-5 CAPLUS

CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:338742 CAPLUS Full-text

DOCUMENT NUMBER: 134:352782

TITLE: Oligomers and oligomeric segments of α-hydroxy carboxylic acids and α-amino acids and uses in improving bioavailability of nutrition supplement for ruminants

INVENTOR(S): Lorbert, Stephen J.; **Schasteen, Charles S.**; Nam, Paul K. S.; Forciniti, Daniel; Rajesh, Mathur P.; Kapila, Shubhender

PATENT ASSIGNEE(S): Novus International, Inc., USA

SOURCE: PCT Int. Appl., 116 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032906	A2	20010510	WO 2000-US29897	20001030
WO 2001032906	A3	20020214		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2389233	A1	20010510	CA 2000-2389233	20001030
EP 1224318	A2	20020724	EP 2000-976719	20001030
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: US 1999-162725P P 19991029
WO 2000-US29897 W 20001030

OTHER SOURCE(S): MARPAT 134:352782

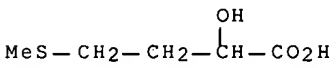
ED Entered STN: 11 May 2001

AB The invention is relates to the enzymic synthesis and composition of α-hydroxy carboxylic acid and α-amino acid or peptide co-oligomers wherein a residue of the α-hydroxy carboxylic acid is linked to a residue of the α-amino acid or peptide by an amide linkage. Proteolytic enzyme papain catalyzes co-oligomerization of the α-hydroxy carboxylic acid and α-amino acid. The degree and distribution of oligomerization varies upon the type and concns. of different reaction mixts. utilized and upon the length of allowed reaction time. The present invention is further directed to a process for the preparation of an oligomer. The process comprises preparing a mixture containing (i) an enzyme, (ii) an α-hydroxycarboxylic acid and (iii) an α-amino acid or a peptide oligomer. The α-hydroxy carboxylic acid and the α-amino acid each are present in the mixture as a free acid, acid halide, amide, ester or anhydride independently of the other. The process further comprises forming an amide linkage between the residue of the α-hydroxy carboxylic acid and the residue of the α-amino acid or the peptide oligomer. The resultant oligomers may be provided to ruminants as bioavailable amino acid supplements that are resistant to degradation in the rumen.

IT **583-91-5**, 2-Hydroxy-4-(methylthio)butyric acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(oligomers and oligomeric segments of α-hydroxy carboxylic acids and α-amino acids and uses in improving bioavailability of nutrition supplement for ruminants)

RN 583-91-5 CAPLUS

CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



L72 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:117473 CAPLUS Full-text

DOCUMENT NUMBER: 132:150975

TITLE: Advantage of methionine-hydroxy analogues in pig feeding

AUTHOR(S): **Buttin, Pierre**

CORPORATE SOURCE: Novus International, Brussels, B-1200, Belg.

SOURCE: Kraftfutter (2000), (1), 30,32
CODEN: KFFUAS; ISSN: 0023-4427

PUBLISHER: Deutscher Fachverlag

DOCUMENT TYPE: Journal; General Review

LANGUAGE: German

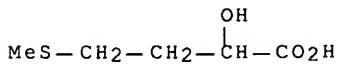
ED Entered STN: 20 Feb 2000

AB A brief review with refs. available from the editor on Met supplementation in feed. Balanced swine feed, optimized with individual amino acids such as Lys, Thr, and Met has recently gained in importance. This can be explained by many factors, including the trend towards genetically leaner pigs with higher amino acid requirements, the enhanced consumption of alternative products which by nature have a lower content of sulfurous amino acids, a change towards highly digestible amino acid optimizations and the growing use of low protein diets to improve intestinal health and to reduce N excretion.

IT **583-91-5**, DL-2-Hydroxy-4-methylthio butanoic acid
RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses)
(methionine-hydroxy analogs in swine feeding)

RN 583-91-5 CAPLUS

CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



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      2-HYDROXY-4-(METHYLTHIO)BUTYRIC ACID
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L24            1 SEA FILE=REGISTRY ABB=ON  L3 AND 1/NC
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RECORD WITH THE COMPONENT REGISTRY NUMBER FOR ANY OF THE FOLLOWING ACIDS:  FORMIC,
PROPIONIC, BUTYRIC, LACTIC, MALIC, TARTARIC, CITRIC, FUMARIC, SORBIC
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L73  ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        2005:287778  CAPLUS  Full-text
DOCUMENT NUMBER:         143:43206
TITLE:                   Effects of intestinal modification by antibiotics and
                         antibacterials on utilization of methionine
                         sources by broiler chickens
AUTHOR(S):               Motl, M. A.; Fritts, C. A.; Waldroup, P. W.
CORPORATE SOURCE:        Poultry Science Department, University of Arkansas,
                         Fayetteville, AR, 72701, USA
SOURCE:                  Journal of Applied Poultry Research (2005), 14(1),
                         167-173
                         CODEN: JAPRFS; ISSN: 1056-6171
PUBLISHER:               Poultry Science Association, Inc.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
ED   Entered STN:  04 Apr 2005
```

AB A study was conducted to determine if the response to different sources of Met was influenced by the presence or absence of antibiotics and antibacterials that might alter intestinal microflora. A Met-deficient diet (0.33% by anal.), based on corn and soybean meal, was fed with or without a mixture providing 200 g/ton of bacitracin methylene disalicylate, 200 g/ton of chlortetracycline, 100 g/ton of penicillin, and 100 g/ton of sulfaquinoxaline. Diets were fortified with DL-Met or the liquid form of 2-hydroxy-4-methylthiobutanoic acid (HMB) to provide supplemental levels of Met ranging from 0.0 to 0.20% in increments of 0.04%, based on 99% activity for DL-Met and 88% activity for HMB. The exptl. treatments consisted of a 2 + 2 + 6 factorial arrangement of treatments with 2 diet types (medicated and unmedicated), 2 Met sources (DL-Met and HMB) at 6 levels of supplementation for a total of 24 dietary treatments. Each of these was fed to 6 replicate pens of 5 male chicks from 0 to 21 d, stratified across tiers in the battery. Feeding the medicated diets resulted in a significant reduction in intestinal bacterial as measured by total aerobic plate count of ileal contents, with significant improvements in BW and feed conversion. However, there were no significant interactions between the medications and the response to the 2 sources of Met. There was no difference in BW or feed conversion related to the 2 different sources of Met when fed to provide equimolar amts. of Met activity. Chicks responded to increasing levels of Met, but there was no interaction between source and level of Met for BW or feed conversion. Peak response appeared to occur at approx. 0.08 % supplemental (0.41 % total) Met, somewhat below current NRC recommendations. It does not appear that a difference in antibiotic content of test diets is responsible for the discrepancy in reported responses to the 2 sources of Met.

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IT   583-91-5
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (effects of intestinal modification by antibiotics and
        antibacterials on utilization of methionine sources by broiler
        chickens)
RN   583-91-5  CAPLUS
CN   Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI)  (CA INDEX NAME)
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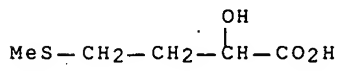


REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

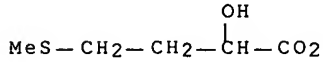
L73 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1961:2280 CAPLUS Full-text
DOCUMENT NUMBER: 55:2280
ORIGINAL REFERENCE NO.: 55:391f-i,392a
TITLE: Amino acid analogs
INVENTOR(S): Blake, Edward S.; Wineman, Robert J.
PATENT ASSIGNEE(S): Monsanto Chemical Co.
SOURCE: Continuation-in-part of U.S. 2,745,745 (CA 51, 1251f)
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2938053		19600524	US 1955-610155	19551229

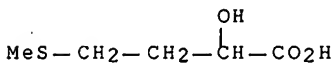
ED Entered STN: 22 Apr 2001

AB Methionine analogs prepared by heating 2-hydroxy-4-(alkylthio)butyronitrile in an aqueous solution of 50-85% H_2SO_4 at 20-50° are useful as fungicides, bactericides, and virus control agents through the antimetabolic action. Thus, 166.4 g. 3-(methylthio)propionaldehyde (I) is shaken 10 min. with 152 g. Na_2SO_3 in 576 ml. H_2O below 35°, and 78.4 g. NaCN is added in portions at 25-35°. The oil is separated, the aqueous layer extracted with C_6H_6, and the C_6H_6 exts. combined with the oil layer, dried over anhydrous Na_2SO_4, and vacuum distilled at 40° to yield 200.4 g. 2-hydroxy-4-(methylthio)butyronitrile (II). To 199 g. II are added, dropwise, 27 g. H_2O and 152 g. 98% H_2SO_4 at about 35°. The mixture is agitated 10 min. and 316 ml. H_2O is added below 35°; the solution is cooled to 5-10°, filtered, and the crystals washed with 100 parts H_2O, dried at room temperature under vacuum, and dried at 65° to yield 2-hydroxy-4-(methylthio)butyramide (III), m. 98-100°. Treating the filtrate with 316 ml. H_2O and 160 g. $CaCO_3$, removing the $CaSO_4$ and excess $CaCO_3$ by filtration, concentrating the filtrate under vacuum at 35°, and recrystg. from boiling acetone yields addnl. III, giving a total yield of 155 g. Also, 156.7 g. I, 0.45 g. pyridine, and 45 g. HCN yield II. A mixture of 110 g. 98% H_2SO_4 and 36 g. H_2O is added dropwise to II (prepared from 104.2 g. I) over 1.5 hrs. with stirring at 30-35°, the solution stirred 10 min., 514 ml. H_2O is added over a period of 3 to 4 min., the temperature raised to the b. p. during 40 min., and the solution refluxed 1 hr. with stirring to yield a mixture of 2-hydroxy-4-(methylthio)butyric acid (IV), H_2O, and ammonium sulfate. Treatment of 399 g. IV reaction mixture with 600 ml. H_2O and 40.8 g. $Ca(OH)_2$ in 250 ml. H_2O for 1.5 hrs. gives 26.1% ammonium salt of DL-IV, 66.6% Ca salt of DL-IV, 3.72% H_2O, and 3.2% $CaSO_4$. Also prepared are 2-hydroxy-4-(ethylthio)butyronitrile, 2-hydroxy-4-(ethylthio)butyramide, the free acid and Ca salt, and 2-hydroxy-4-(isopropylthio)butyramide. Cf. CA 51, 1251f.

IT **583-91-5**, Butyric acid, 2-hydroxy-4-(methylthio)-
(and salts)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



L73 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1955:9390 CAPLUS Full-text
DOCUMENT NUMBER: 49:9390
ORIGINAL REFERENCE NO.: 49:1957c-e
TITLE: Effect of various methionine analogs on the bacteriostatic action of methionine sulfoximine
AUTHOR(S): Gershoff, S. N.
CORPORATE SOURCE: Harvard Univ. School of Public Health, Boston
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (1954), 87, 85-6
CODEN: PSEBAA; ISSN: 0037-9727
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ED Entered STN: 22 Apr 2001
AB Methionine sulfoximine (I) inhibits the growth of Leuconostoc mesenteroides, and this inhibition is reversed by methionine (II). 3-Methylmethionine, S-methylpenicillamine sulfoxide, and 3-methylmethionine sulfoxide do not reverse the action of I. Inhibition by I was completely reversed by glutamine, although glutamine showed no growth-promoting activity in the absence of I and hence cannot replace II for growth of the organism. Similar studies with asparagine and citrulline gave neg. results. L. mesenteroides utilized methionine sulfoxide to the same degree as II in the absence of I, but II was more effective than the sulfoxide in reversing the effect of I. Methionine sulfone did not serve as a source of II for growth, but it partially reversed the action of I. α-Hydroxy-γ-(methylthio)butyric acid partially replaced II for growth but had no influence on the effect of I.
IT **583-91-5**, Butyric acid, 2-hydroxy-4-(methylthio)-
(effect on bacteriostatic action of methionine sulfoximine)
RN 583-91-5 CAPLUS
CN Butanoic acid, 2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



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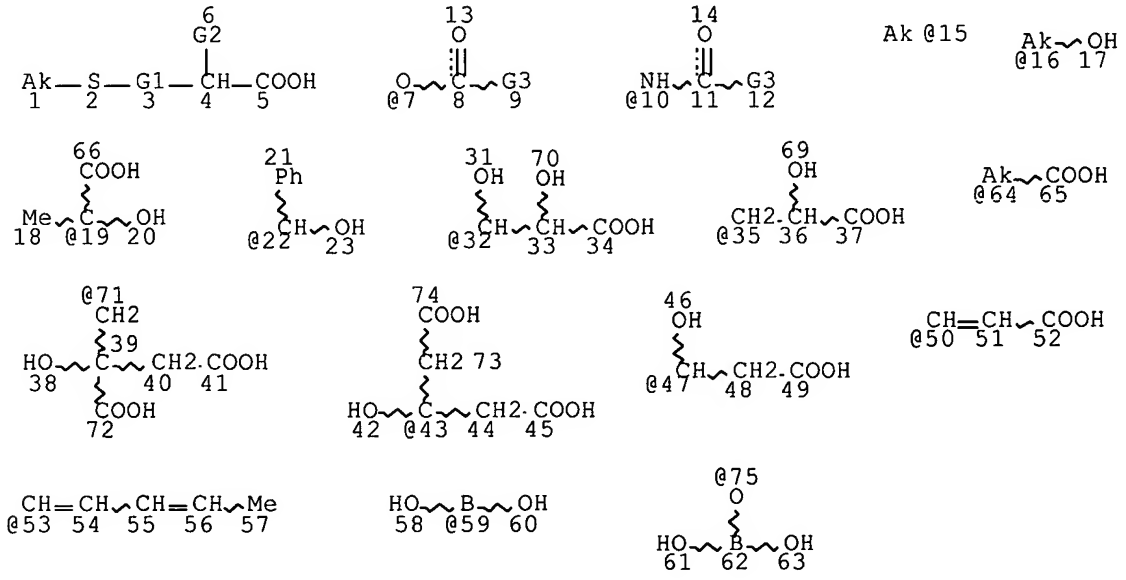

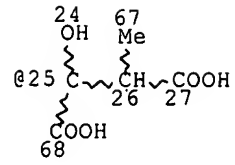

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FILE 'ANABSTR' ENTERED AT 10:21:39 ON 28 FEB 2007
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=> => d que l78 nos
L56             STR
L59         337 SEA FILE=REGISTRY SSS FUL L56
L66         639 SEA L59
L67       68168 SEA MICROBICID? OR ANTIMICROB?
L68      197800 SEA ANTIBACTERI? OR BACTERICID?
L77        3586 SEA BACTERIOSTAT?
L78           8 SEA L66 AND (L67 OR L68 OR L77)


=> => fil wpix; d que nos l88
FILE 'WPIX' ENTERED AT 10:27:24 ON 28 FEB 2007
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FILE LAST UPDATED:                          27 FEB 2007   <20070227/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE:     200714      <200714/DW>
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>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
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>>> New and revised Manual Codes went live in Derwent World Patents Index
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    http://scientific.thomson.com/dwpi-manualcoderevision <<<
'BI ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE


L56             STR
L81          25 SEA FILE=WPIX SSS FUL L56
L82          94 SEA FILE=WPIX ABB=ON  L81/DCR
L83          94 SEA FILE=WPIX ABB=ON  (RAAZNM/DRN,DCN,DCRE OR RABZAG/DRN,DCN,DC
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L84          94 SEA FILE=WPIX ABB=ON  (L82 OR L83)
L85        2997 SEA FILE=WPIX ABB=ON  BACTERIOSTAT?/BI,ABEX
L86       31135 SEA FILE=WPIX ABB=ON  MICROBICID?/BI,ABEX OR ANTIMICROB?/BI,ABE
                X
L87       59114 SEA FILE=WPIX ABB=ON  ANTIBACTERI?/BI,ABEX OR BACTERICID?/BI,AB
                EX
L88           6 SEA FILE=WPIX ABB=ON  L84 AND (L85 OR L86 OR L87)


=> dup rem l76,l78,l88
FILE 'CAPLUS' ENTERED AT 10:27:37 ON 28 FEB 2007
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PROCESSING COMPLETED FOR L76
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PROCESSING COMPLETED FOR L78
PROCESSING COMPLETED FOR L88
L89          39 DUP REM L76 L78 L88 (2 DUPLICATES REMOVED)
                ANSWERS '1-27' FROM FILE CAPLUS
                ANSWERS '28-35' FROM FILE BIOSIS
                ANSWERS '36-39' FROM FILE WPIX

=> d ibib ed abs hitstr 1-27; d iall 28-35; d iall abeq tech hit hitstr 36-39; fil
hom

L89  ANSWER 1 OF 39  CAPLUS  COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER:        2006:980019  CAPLUS  Full-text
DOCUMENT NUMBER:         145:342501
TITLE:                   Compositions comprising n-propanoyl derivatives of
                         amino acids, aminocarbohydrates and derivatives
                         thereof for prevention and treatment of various
                         disorders
INVENTOR(S):             Yu, Ruey J.; Van Scott, Eugene J.
PATENT ASSIGNEE(S):      USA
SOURCE:                  U.S. Pat. Appl. Publ., 11pp.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     US 2006211754         A1    20060921    US 2006-375570           20060315
     WO 2006101940         A2    20060928    WO 2006-US9438           20060316
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       US 2005-661921P     P  20050316
                                             US 2006-375570      A  20060315
OTHER SOURCE(S):         MARPAT 145:342501
ED   Entered STN:  21 Sep 2006
AB   The embodiments relate to compns. comprising therapeutically effective amts.
     of at least one N-propanoyl derivative of amino acids, aminocarbohydrates, and
     derivs. thereof.  The compns. are useful the prevention and treatment of
     symptoms or syndromes associated with nervous, vascular, musculoskeletal, or
     cutaneous systems.  The compns. may be topically or systemically administered
     to a subject in need thereof. Thus, N-propanoyl-D-glucosamine 5 g was
     dissolved in water 15 mL and propylene glycol 5 mL, and the solution thus
     obtained was mixed uniformly with hydrophilic ointment or oil-in-water
     emulsion 75 g to obtain a cream containing 5% N-propanoyl-D-glucosamine (pH
     4.7).  A male subject having an itchy lesion on his foot due to atopic eczema,
     topically applied the cream prepared to the lesion.  A few minutes after the
     topical application, the itch disappeared completely and the skin remained
     free of itch for the following 12 h.
IT   54746-51-9
```
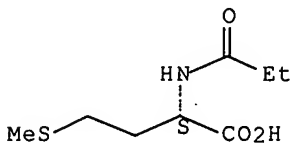

RL: COS (Cosmetic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(systemic and topical compns. comprising propanoyl derivs. of amino acids and aminocarbohydrates for prevention and treatment of various disorders)

RN 54746-51-9 CAPLUS
CN L-Methionine, N-(1-oxopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L89 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2005:238861 CAPLUS Full-text
DOCUMENT NUMBER: 142:291332
TITLE: Prophylaxis of and treatment for infections from the family Chlamydiaceae using amino acids such as leucine or methionine
INVENTOR(S): Meyer, Thomas F.; Al-Younes, Hesham
PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Forderung der Wissenschaften e.V., Germany
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

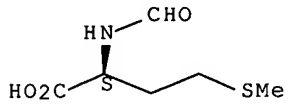
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005023368	A1	20050317	WO 2004-EP9926	20040906
WO 2005023368	B1	20050512		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2003-20091 A 20030904
ED Entered STN: 18 Mar 2005
AB The invention discloses a method for treatment of infections caused by the intracellular bacteria Chlamydia and Chlamydophila using supplements of certain naturally occurring substances (nutrients), particularly amino acids.
IT **4289-98-9**, Formyl-L-methionine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acids for prophylaxis and treatment for Chlamydiaceae infections)

RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1342373 CAPLUS Full-text
DOCUMENT NUMBER: 146:77532
TITLE: Methods and kits for obtaining a metabolic profile of living animal or plant cells in a multi-test format
INVENTOR(S): Bochner, Barry; Wiater, Larry
PATENT ASSIGNEE(S): Biolog Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 67pp., Cont.-in-part of U.S. Ser. No. 192,161.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006286627	A1	20061221	US 2006-418804	20060505
US 2003162164	A1	20030828	US 2002-126345	20020419
WO 2003089652	A2	20031030	WO 2003-US11866	20030416
WO 2003089652	A3	20040318		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003223660	A1	20031103	AU 2003-223660	20030416
EP 1501938	A2	20050202	EP 2003-719801	20030416
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005260558	A1	20051124	US 2005-192161	20050727

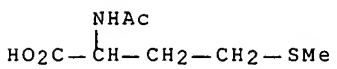
PRIORITY APPLN. INFO.:

US 2001-285541P	P	20010420
US 2002-126345	B1	20020419
US 2005-678566P	P	20050505
US 2005-192161	A2	20050727
WO 2003-US11866	W	20030416

ED Entered STN: 22 Dec 2006
AB The present invention relates to growing and testing eukaryotic cells (e.g., animal or plant cells) in a multi-test format. In particular, the present invention provides methods and kits for obtaining a complex metabolic profile

of animal cells. In addition, the present invention provides tools for assaying the effects of candidate compds. (e.g., hormones) on substrate utilization by mammalian cells. A549 cells were suspended at 400,000 cells/mL in RPMI salts+RPMI-vitamins+1+ Pen/Strep (Penicillin/Streptomycin) without amino acids but containing either 5 % or 20 % dialyzed or non-dialyzed FCS. Cells were dispensed in 50 uL to wells containing a plurality of testing substrates (glycogen, glucose and pyruvate among others) at final concns. of 20, 15, 10.5, 2.5 and 1.2 mM of each testing substrate. The cells were incubated for 2 days at 37° under 5 % CO2-95 % air (preincubation phase), before a redox dye mix was added. The cells were incubated for an addnl. 5 h at 37° under 5 % CO2-95 % air (incubation phase), before color development was measured. A metabolic profile of A549 cells in the presence of serum was obtained.

IT **1115-47-5**, N-Acetyl-DL-methionine
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(as testing substrate; kits and methods for obtaining metabolic profiles of living animal or plant cells)
RN 1115-47-5 CAPLUS
CN Methionine, N-acetyl- (9CI) (CA INDEX NAME)



L89 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1037503 CAPLUS Full-text
DOCUMENT NUMBER: 145:382939
TITLE: Hair tonics for the promotion of hair growth containing inositol, milk proteins and sulfur-containing amino acids
PATENT ASSIGNEE(S): ICB Investment Consulting und Beteiligungen G.m.b.H., Austria
SOURCE: Ger. Offen., 8pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

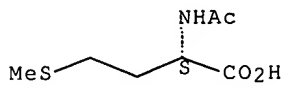
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102005012021	A1	20061005	DE 2005-102005012021	20050316
PRIORITY APPLN. INFO.:			DE 2005-102005012021	20050316

ED Entered STN: 06 Oct 2006
AB The invention concerns a formulation for the care and treatment of hair and scalp to promote hair growth and to prevent alopecia; the formulations contain inositol, milk proteins, sulfur-containing amino acids, glycoproteins, ethanol, and isopropanol. Moisturizers and other cosmetic substances can be added. Thus a formulation contained (weight/weight%): denat. alc. 24.0; isopropanol 2.0; L-arginine 3.0; active substance concentrate 10.0; citric acid 1.62; water 54.00. The active substance concentrate included (weight/weight%): glycerol 50.0; panthenylethyl ether 2.5; inositol 2.5; milk proteins 0.5; lactose 0.4; acetylcysteine 0.5; acetylmethionine 0.5; glycoproteins 0.04; potassium sorbate 0.05; limonene 0.01; methylparaben, ethylparaben, butylparaben, isobutylparaben, propylparaben mixture 0.1.
IT **65-82-7**, L-Acetylmethionine

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair tonics for promotion of hair growth containing inositol, milk proteins and sulfur-containing amino acids)

RN 65-82-7 CAPLUS
CN L-Methionine, N-acetyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:540462 CAPLUS Full-text
DOCUMENT NUMBER: 143:83454
TITLE: Enlargement of mucocutaneous or cutaneous organs and sites with topical compositions containing N-acyl-aldosamine or N-acylamino acid compounds
INVENTOR(S): Yu, Ruey J.; Van Scott, Eugene J.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005055947	A2	20050623	WO 2004-US41009	20041208
WO 2005055947	A3	20040825		
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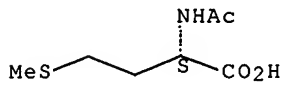
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005171194	A1	20050804	US 2004-6822	20041208
PRIORITY APPLN. INFO.:			US 2003-527307P	P 20031208
			US 2004-570895P	P 20040514

ED Entered STN: 23 Jun 2005
AB Compns. comprising a hydroxycarboxylic acid, N-acyl-aldosamine, N-acylamino acid or related compound on topical application are beneficial to plump and pout lips, enhance and firm eyelids, enlarge and augment breasts, elongate and expand penis. Because of antioxidant property, certain hydroxycarboxylic acids, N-acyl-aldosamines, N-acylamino acids and related compds. also are useful for topical administration to prevent occurrence of breast cancer or other forms of tumors and cancers. Thus 3 g N-propanoyl proline was dissolved in 9 mL water and 3 mL propylene glycol; the solution was mixed with 45 g hydrophobic ointment.

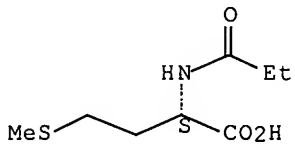
IT **65-82-7**, N-Acetylmethionine **54746-51-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enlargement of mucocutaneous or cutaneous organs and sites with topical compns. containing N-acyl-aldosamine or N-acylamino acid compds.)
RN 65-82-7 CAPLUS
CN L-Methionine, N-acetyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 54746-51-9 CAPLUS
CN L-Methionine, N-(1-oxopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



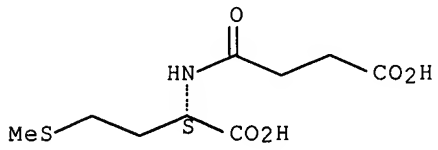
L89 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:244333 CAPLUS Full-text
DOCUMENT NUMBER: 143:307
TITLE: Atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints: a promising approach for modeling of **antibacterial** activity
AUTHOR(S): Marrero-Ponce, Yovani; Medina-Marrero, Ricardo; Torrens, Francisco; Martinez, Yamile; Romero-Zaldivar, Vicente; Castro, Eduardo A.
CORPORATE SOURCE: Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, 54830, Cuba
SOURCE: Bioorganic & Medicinal Chemistry (2005), 13(8), 2881-2899
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Mar 2005
AB The Topol. Mol. Computer Design (TOMOCOMD-CARDD) approach has been introduced for the classification and design of antimicrobial agents using computer-aided mol. design. For this propose, atom, atom-type, and total quadratic indexes have been generalized to codify chemical structure information. In this sense, stochastic quadratic indexes have been introduced for the description of the mol. structure. These stochastic fingerprints are based on a simple model for the intramol. movement of all valence-bond electrons. In this work, a complete data set containing 1006 antimicrobial agents is collected and presented. Two structure-based antibacterial activity classification models have been generated. The models (including nonstochastic and stochastic

indexes) classify correctly more than 90% of 1525 compds. in training sets. These models permit the correct classification of 92.28% and 89.31% of 505 compds. in an external test sets. The approach, also, satisfactorily compares with respect to nine of the most useful models for antimicrobial selection reported to date. Finally, a virtual screening of 87 new compds. reported in the anti-infective field with antibacterial activities is developed showing the ability of the models to identify new leads as antibacterial.

IT **7251-64-1**, N-Succinyl-L-Methionine
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints as promising approach for modeling **antibacterial** activity)

RN 7251-64-1 CAPLUS
CN L-Methionine, N-(3-carboxy-1-oxopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

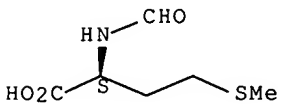
L89 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:430717 CAPLUS Full-text
DOCUMENT NUMBER: 140:429025
TITLE: Peptide deformylase activated prodrugs
INVENTOR(S): Ballatore, Carlo; Doppalapudi, Venkata Ramana; Sergeeva, Maria V.
PATENT ASSIGNEE(S): Newbiotics, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004043400	A2	20040527	WO 2003-US36124	20031114
WO 2004043400	A3	20040930		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2505914	A1	20040527	CA 2003-2505914	20031114
AU 2003290779	A1	20040603	AU 2003-290779	20031114
US 2004236096	A1	20041125	US 2003-714255	20031114

US 7001922	B2	20060221			
BR 2003015537	A	20050927	BR 2003-15537		20031114
EP 1585751	A2	20051019	EP 2003-783362		20031114
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
JP 2006514009	T	20060427	JP 2004-552156		20031114
US 2006063743	A1	20060323	US 2005-256061		20051021
PRIORITY APPLN. INFO.:			US 2002-426771P	P	20021114
			US 2003-714255	A3	20031114
			WO 2003-US36124	W	20031114

OTHER SOURCE(S): MARPAT 140:429025
ED Entered STN: 27 May 2004
AB This invention provides compds. and methods for using them to inhibit the growth of a microorganism that expresses peptide deformylase. Drugs such as mitomycin, bleomycin, ciprofloxacin, can be bound to linkers.
IT **4289-98-9**, N-Formylmethionine
RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide deformylase activated prodrugs)
RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



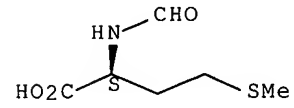
L89 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:855762 CAPLUS Full-text
DOCUMENT NUMBER: 139:354460
TITLE: Peptide deformylase activated prodrugs
INVENTOR(S): Sergeeva, Maria V.; Doppalapudi, Venkata Ramana
PATENT ASSIGNEE(S): Newbiotics, Inc., USA; Celmed Oncology (USA), Inc.
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003088913	A2	20031030	WO 2003-US11981	20030417
WO 2003088913	A3	20040401		
WO 2003088913	A8	20050106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, RO, SE, SI, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2482029	A1	20031030	CA 2003-2482029	20030417

AU 2003225047	A1	20031103	AU 2003-225047		20030417
EP 1499318	A2	20050126	EP 2003-721752		20030417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
US 2005096254	A1	20050505	US 2003-511489		20030417
CN 1662238	A	20050831	CN 2003-813847		20030417
JP 2006507219	T	20060302	JP 2003-585666		20030417
PRIORITY APPLN. INFO.:			US 2002-374089P	P	20020418
			WO 2003-US11981	W	20030417

OTHER SOURCE(S): MARPAT 139:354460
ED Entered STN: 31 Oct 2003
AB This invention provides a method for inhibiting the growth of a microorganism that expresses Peptide Deformylase by contacting the microorganism with an effective amount of the compound described herein. This method inhibits the growth of gram-pos. and gram-neg. microorganism, e.g., S. aureus, S. epidermidis, K. pneumoniae, E. aerogenes, and E. cloacae. This method can be practiced in vitro, ex vivo and in vivo. Further provided is a method for alleviating the symptoms of an infection by a Peptide Deformylase expressing microorganism in a subject by administering or delivering to the subject an effective amount of the compound described above.
IT **4289-98-9**, N-Formyl-L-methionine
RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide deformylase activated prodrugs for inhibiting growth of microorganism)
RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L89 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:868689 CAPLUS Full-text
DOCUMENT NUMBER: 137:358150
TITLE: Peptide deformylase activated prodrugs
INVENTOR(S): Sergeeva, Maria Vladimir; Doppalapudi, Venkata Ramana
PATENT ASSIGNEE(S): Newbiotics, Inc., USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

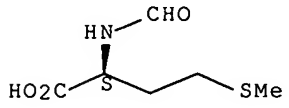
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002089739	A2	20021114	WO 2002-US14500	20020509
WO 2002089739	A3	20030821		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2447470	A1	20021114	CA 2002-2447470	20020509
US 2003091587	A1	20030515	US 2002-142089	20020509
US 7163923	B2	20070116		
EP 1399467	A2	20040324	EP 2002-741696	20020509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002010149	A	20040629	BR 2002-10149	20020509
JP 2005505502	T	20050224	JP 2002-586878	20020509
PRIORITY APPLN. INFO.:			US 2001-290099P	P 20010509
			WO 2002-US14500	W 20020509

OTHER SOURCE(S): MARPAT 137:358150
ED Entered STN: 15 Nov 2002
AB This invention provides a method for inhibiting the growth of a microorganism that expresses Peptide Deformylase by contacting the microorganism with an effective amount of the compound described herein. This method inhibits the growth of gram-pos. and gram-neg. microorganism, e.g., S. aureus, S. epidermidis, K. pneumoniae, E. aerogenes, E. cloacae, M. catarrhalis, E. coli, E. faecalis, H. influenzae and P. aeruginosa. This method can be practiced in vitro, ex vivo and in vivo. Further provided is a method for alleviating the symptoms of an infection by a Peptide Deformylase-expressing microorganism in a subject by administering or delivering to the subject an effective amount of the compound described above.
IT **4289-98-9**, N-Formyl-L-methionine
RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide deformylase activated prodrugs for inhibiting growth of microorganism)
RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L89 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:798227 CAPLUS Full-text
DOCUMENT NUMBER: 135:344473
TITLE: Oxazolidinone derivatives with **antibacterial** activity
INVENTOR(S): Gravestock, Michael Barry; Betts, Michael John; Griffin, David Alan; Matthews, Ian Richard
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
SOURCE: PCT Int. Appl., 143 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001081350	A1	20011101	WO 2001-GB1815		20010423
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2405349	A1	20011101	CA 2001-2405349		20010423
BR 2001010240	A	20030107	BR 2001-10240		20010423
EP 1286998	A1	20030305	EP 2001-921669		20010423
EP 1286998	B1	20040609			
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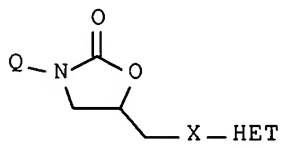
HU 200300416	A2	20030628	HU 2003-416		20010423
JP 2003531211	T	20031021	JP 2001-578439		20010423
EE 200200598	A	20040415	EE 2002-598		20010423
NZ 521765	A	20040528	NZ 2001-521765		20010423
AT 268778	T	20040615	AT 2001-921669		20010423
PT 1286998	T	20040930	PT 2001-921669		20010423
ES 2220759	T3	20041216	ES 2001-1921669		20010423
AU 781784	B2	20050616	AU 2001-48636		20010423
IN 2002MN01363	A	20050304	IN 2002-MN1363		20021001
ZA 2002008187	A	20040211	ZA 2002-8187		20021010
NO 2002005091	A	20021209	NO 2002-5091		20021023
US 2003216373	A1	20031120	US 2003-258355		20030506
US 7141583	B2	20061128			
HK 1053114	A1	20050218	HK 2003-105394		20030725
PRIORITY APPLN. INFO.:			GB 2000-9803	A	20000425
			WO 2001-GB1815	W	20010423

OTHER SOURCE(S): MARPAT 135:344473
ED Entered STN: 02 Nov 2001
GI



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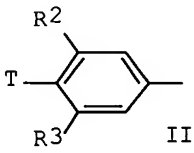

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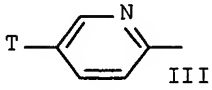

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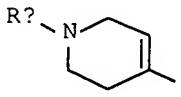

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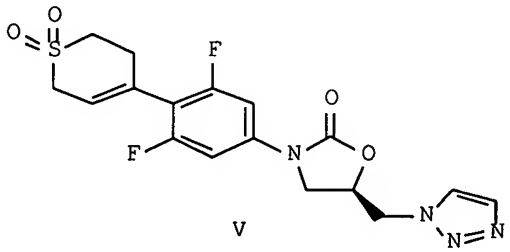


V

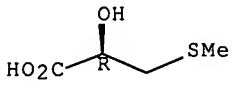
AB The title compds. [I; X = O, NH, S, etc.; HET = (un)substituted C-linked 5-membered heteroaryl ring containing 2-4 heteroatoms selected from N, O and S, etc.; Q = II, III, etc. (wherein R2, R3 = H, F; T = an N-linked (fully unsatd.) 5-membered heteroaryl ring system or IV; Rc = R13CO, R13SO2, R13CS,

etc.; R13 = alkyl, etc.)], useful as antibacterial agents, were prepared and formulated. E.g., a multi-step synthesis of the oxazoline (R)-V which showed MIC of 0.125 μg/mL against Staphylococcus aureus (Oxford), was given.

IT **140460-43-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxazolidinone derivs. with **antibacterial** activity)

RN 140460-43-1 CAPLUS
CN Propanoic acid, 2-hydroxy-3-(methylthio)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:717302 CAPLUS Full-text
DOCUMENT NUMBER: 135:277734
TITLE: Topical preparations and cosmetics for prevention and treatment of acne vulgaris
INVENTOR(S): Hamada, Kazuhiko; Uemura, Yoichi; Seino, Jiro
PATENT ASSIGNEE(S): Pias Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001270828	A	20011002	JP 2000-81875	20000323

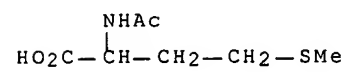
PRIORITY APPLN. INFO.: JP 2000-81875 20000323
ED Entered STN: 02 Oct 2001
AB The topical prepns. and cosmetics (pH 3.3-5.6) contain (partially acylated) chitosan salts (charged amino groups content 40-99%, average mol. weight ≥100,000) 0.01-0.5, polyhydric alcs. 1-30, anti-inflammatory components 0.001-1.0, and antimicrobial components 0.0005-0.3 weight%. A lotion (pH 4.45) containing partially N-myristoylated chitosan lactate 0.1, chitosan glycolate 0.05, allantoin 0.2, stearyl glycyrrhetinate 0.1, Glycyrrhiza glabra flavonoid 0.02, hinokitiol 0.05, cetylpyridinium chloride 0.01, N-cocoyl-L-arginine Et ester DL-pyrrolidonecarboxylic acid salt 0.05, 1,3-butylene glycol 0.5 weight%, etc., showed therapeutic and preventive effects on acne vulgaris in women.

IT **4207-40-3**, Allantoin acetylmethionine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical prepns. and cosmetics for prevention and treatment of acne vulgaris)

RN 4207-40-3 CAPLUS
CN Methionine, N-acetyl-, compd. with (2,5-dioxo-4-imidazolidinyl)urea (1:1) (9CI) (CA INDEX NAME)

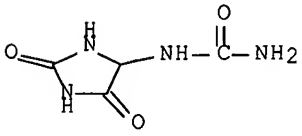
CM 1

CRN 1115-47-5
CMF C7 H13 N O3 S



CM 2

CRN 97-59-6
CMF C4 H6 N4 O3



L89 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:725485 CAPLUS Full-text
DOCUMENT NUMBER: 133:296658
TITLE: Preparation of desleucyl glycopeptide antibiotics
INVENTOR(S): Kahne, Daniel; Walker, Suzanne; Silva, Domingos J.
PATENT ASSIGNEE(S): The Trustees of Princeton University, USA; Incara Pharmaceuticals, Inc.
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000059528	A1	20001012	WO 2000-US8559	20000331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2370782	A1	20001012	CA 2000-2370782	20000331
EP 1173193	A1	20020123	EP 2000-919942	20000331
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US 6518243	B1	20030211	US 2000-540761	20000331
US 2004110665	A1	20040610	US 2003-361603	20030211

PRIORITY APPLN. INFO.: US 1999-127516P P 19990402
US 2000-540761 A1 20000331
WO 2000-US8559 W 20000331

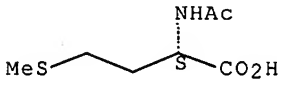
ED Entered STN: 13 Oct 2000

AB Compds. that are analogs of glycopeptide antibiotics are disclosed. The compds. have the formula A1-A2-A3-A4-A5-A6-A7, where each of the groups A2 to A7 is a modified or unmodified α-amino acid residue, A1 is optional and, when present, is an organic group other than N-substituted leucine, and at least one of the groups A1 to A7 is linked via a glycosidic bond to one or more glycosidic groups each having one or more sugar residues, where at least one of said sugar residues is modified to bear at least one hydrophobic substituent. Methods of making these compds., compns. including these compds., and methods of using the compds. to treat infections in a host are also disclosed. Antibacterial test data are tabulated for > 350 compds. of the invention.

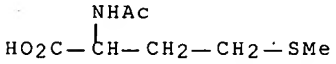
IT **65-82-7 1115-47-5 1509-92-8 4289-98-9**
, N-Formyl-L-methionine **4309-82-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of desleucyl glycopeptide antibiotics)

RN 65-82-7 CAPLUS
CN L-Methionine, N-acetyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

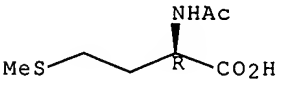


RN 1115-47-5 CAPLUS
CN Methionine, N-acetyl- (9CI) (CA INDEX NAME)



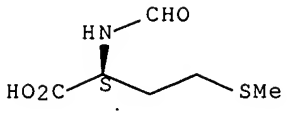
RN 1509-92-8 CAPLUS
CN D-Methionine, N-acetyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

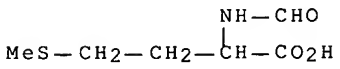


RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 4309-82-4 CAPLUS
CN Methionine, N-formyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:475518 CAPLUS Full-text
DOCUMENT NUMBER: 133:109637
TITLE: Topical composition comprising N-acetylaldosamines or N-acetylamino acids for the treatment of skin disorders
INVENTOR(S): Yu, Ruey J.; Van Scott, Eugene J.
PATENT ASSIGNEE(S): Yugenic Limited Partnership, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000040217	A1	20000713	WO 2000-US330	20000107
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6159485	A	20001212	US 1999-227213	19990108
CA 2358457	A1	20000713	CA 2000-2358457	20000107
BR 2000007430	A	20011016	BR 2000-7430	20000107
EP 1143925	A1	20011017	EP 2000-902347	20000107
EP 1143925	B1	20050824		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002534369	T	20021015	JP 2000-591974	20000107
AU 775209	B2	20040722	AU 2000-24080	20000107
EP 1570840	A2	20050907	EP 2004-29094	20000107
EP 1570840	A3	20051116		
R: DE, ES, FR, GB, IT				
ES 2248042	T3	20060316	ES 2000-902347	20000107
EP 1639994	A2	20060329	EP 2005-18302	20000107

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

PRIORITY APPLN. INFO.: US 1999-227213 A1 19990108
EP 2000-902347 A3 20000107
WO 2000-US330 W 20000107

OTHER SOURCE(S): MARPAT 133:109637

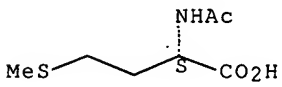
ED Entered STN: 14 Jul 2000

AB Compns. comprising N-acetyl-aldosamines, N-acetylamino acids, and related N-acetyl compds. are useful to alleviate or improve various cosmetic conditions and dermatol. disorders, including changes or damage to skin, nail and hair associated with intrinsic aging and/or extrinsic aging, as well as changes or damage caused by extrinsic factors. N-acetyl-aldosamines, N-acetylamino acids, and related N-acetyl composition may further comprise a cosmetic, pharmaceutical or other topical agent to enhance or create synergetic effects. A solution of 2 g N-acetyl-α-D-glucosamine in 10 mL water was mixed with with a solution of 2 g diphenhydramine in 4 mL water containing 2 g gluconolactone. The solution was then mixed with 80 g cream base or com. available hydrophilic ointment. The ointment was applied on the leg of a male subject having an itchy lesion of lichen simplex chronicus. A few minutes after the topical application, the itch disappeared completely and the skin remained free of itch for following 12 h.

IT **65-82-7**, N-Acetyl methionine **42384-01-0**, N-Acetyl ethionine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical composition comprising N-acetylaldosamines or N-acetylamino acids for treatment of skin disorders)

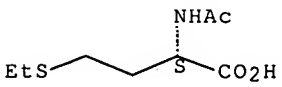
RN 65-82-7 CAPLUS
CN L-Methionine, N-acetyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 42384-01-0 CAPLUS
CN L-Homocysteine, N-acetyl-S-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

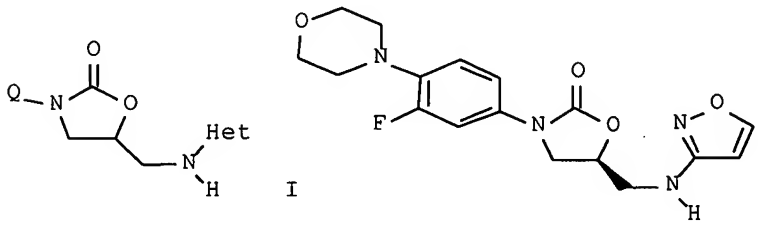
L89 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:260285 CAPLUS Full-text
DOCUMENT NUMBER: 132:293758
TITLE: Preparation of new [(heterocyclylamino)methyl]oxazolidinones as **antibacterials**
INVENTOR(S): Gravestock, Michael Barry

PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021960	A1	20000420	WO 1999-GB3299	19991005
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2342623	A1	20000420	CA 1999-2342623	19991005
AU 9961131	A1	20000501	AU 1999-61131	19991005
AU 754123	B2	20021107		
BR 9914379	A	20010807	BR 1999-14379	19991005
EP 1121358	A1	20010808	EP 1999-947761	19991005
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
HU 200103929	A2	20020729	HU 2001-3929	19991005
JP 2002527439	T	20020827	JP 2000-575866	19991005
NZ 510211	A	20030530	NZ 1999-510211	19991005
ZA 2001002659	A	20020701	ZA 2001-2659	20010330
US 6734200	B1	20040511	US 2001-807113	20010405
NO 2001001738	A	20010607	NO 2001-1738	20010406
US 2003207899	A1	20031106	US 2003-382396	20030306
US 7087629	B2	20060808		

PRIORITY APPLN. INFO.: GB 1998-21938 A 19981009
WO 1999-GB3299 W 19991005
US 2001-807113 A1 20010405

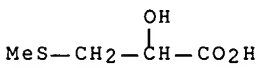
OTHER SOURCE(S): MARPAT 132:293758
ED Entered STN: 21 Apr 2000
GI



AB Title compds. I and their pharmaceutically acceptable salts and/or in-vivo-hydrolyzable esters are disclosed [wherein Het = (un)substituted, C-linked, 5-membered heteroaryl ring containing 2-4 N/O/S atoms, or (un)substituted, C-

linked, 6-membered heteroaryl ring containing 2-3 N atoms; Q = certain (un)substituted Ph, pyridinyl, azolyl, benzazolyl, and related rings]. The compds. are useful as antibacterial agents, with a good spectrum of activity against standard Gram-pos. organisms, notably enterococci, pneumococci, and methicillin-resistant strains of S. aureus and coagulase-neg. staphylococci. Also disclosed are processes for their manufacture, and pharmaceutical compns. containing them. Approx. sixty synthetic examples are given. For instance, (R)-5-(hydroxymethyl)-3-(3-fluoro-4- morpholinophenyl)oxazolidin-2-one underwent Mitsunobu-type coupling with 3-[[(2,2,2-trichloroethoxy)carbonyl]amino]isoxazole (55%), followed by deprotection with Zn in AcOH (25%), to give title compound II. The latter had an MIC of 1 μg/mL against methicillin-resistant coagulase-neg. staphylococci, and 0.5 μg/mL against a methicillin-sensitive strain.

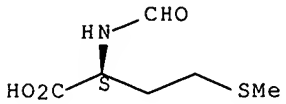
IT **15592-42-4**, 2-Hydroxy-3-(methylthio)propionic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of [(heterocyclylamino)methyl]oxazolidinones as **antibacterials**)
RN 15592-42-4 CAPLUS
CN Propanoic acid, 2-hydroxy-3-(methylthio)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:379669 CAPLUS Full-text
DOCUMENT NUMBER: 133:150831
TITLE: Activation of **antibacterial** prodrugs by peptide deformylase
AUTHOR(S): Wei, Yaoming; Pei, Dehua
CORPORATE SOURCE: Department of Chemistry and Ohio State Biochemistry Program, The Ohio State University, Columbus, OH, 43210, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(10), 1073-1076
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:150831
ED Entered STN: 08 Jun 2000
AB 5'-Dipeptidyl derivs. of 5-fluorodeoxyuridine (FdU) were synthesized. The compds. are biol. inactive but can be activated by peptide deformylase, which removes the N-terminal formyl group of the dipeptide, to release the active drug FdU via an intramol. cyclization reaction. Because the deformylase is ubiquitous among bacteria but absent in mammalian cells, the target compds. provide a novel class of potential antibacterial agents.
IT **4289-98-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(activation of **antibacterial** prodrugs by peptide deformylase)
RN 4289-98-9 CAPLUS
CN L-Methionine, N-formyl- (9CI) (CA INDEX NAME)

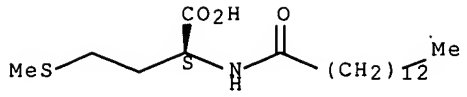
Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:592961 CAPLUS Full-text
DOCUMENT NUMBER: 129:313837
TITLE: The ability of the rat to metabolize myristoyl-methionine: an acylamino acid with potentially useful **antibacterial** properties
AUTHOR(S): Arnold, D. L.; McGuire, P. F.; Miller, D.; Malcolm, S.; Hayward, S.; Paquet, A.
CORPORATE SOURCE: Toxicology Research Division, Bureau of Chemical Safety, Food Directorate, Health Canada, Tunney's Pasture, Ottawa, ON, K1A 0L2, Can.
SOURCE: Food and Chemical Toxicology (1998), 36(9/10), 771-779
CODEN: FCTOD7; ISSN: 0278-6915
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 Sep 1998
AB Two expts. with Sprague-Dawley rats tested their ability to hydrolyze myristoyl-methionine (M-M) into myristic acid and L-methionine (M). In the first experiment, lasting for 3 days, male rats were orally administered [9,10-3H]myristoyl-L-[35S]methionine. The recovery of radioactivity was approx. 90% for both isotopes; 19% of the administered 3H was recovered in the urine and 16% in the feces, while the recovered 35S activity was 13 and 12%, resp. The balance of the radioactivity was found among the tissues, organs and blood. In the second experiment, male and female rats received soybean-based diets which were supplemented with either 0.305% M-M or 0.2% M (both diets contained equal amts. of M) for periods up to 4 wk. The growth rate of the rats receiving the 0.305% M-M diets was slightly slower than that for the rats on the 0.2% M diet, but the difference was not statistically significant ($P > 0.05$). The M-M rats had a transitory decrease in feed consumption, suggesting that palatability may have contributed to the growth difference and that a somewhat greater amount of M-M was necessary for the rat to attain the same growth rate as that produced by 0.2% M. When the amount of dietary M-M was increased to 3.05% M-M, a greater reduction in feed consumption and body weight gain was observed This latter diet was an initial attempt to study the potential toxicity of M-M. None of the haematol., clin. chemical or organ weight data suggested that M-M was overtly toxic per se, but longer-term feeding studies are needed to evaluate the potential toxicity of M-M more fully.
IT **75383-77-6**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ability of rat to metabolize myristoyl-methionine)
RN 75383-77-6 CAPLUS
CN L-Methionine, N-(1-oxotetradecyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L89 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:150184 CAPLUS Full-text
DOCUMENT NUMBER: 128:158913
TITLE: Pharmaceutical compositions containing acyl- and lipo-amino acids for the treatment of burns and wound
PATENT ASSIGNEE(S): Morelle, Jean, Fr.; Lauzanne, Eliane; Rothfuss, Jacqueline
SOURCE: Fr. Demande, 8 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

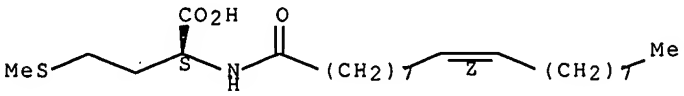
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2747309	A1	19971017	FR 1996-4713	19960416
FR 2747309	B1	19980522		
PRIORITY APPLN. INFO.:			FR 1996-4713	19960416

ED Entered STN: 13 Mar 1998
AB Pharmaceutical compns. containing acyl- and lipo- amino acids for the treatment of burns and wound are claimed. These amino acids and their zinc salts have anti-radical, anti-bacterial, and anti-enzymic properties. A pharmaceutical composition contained caprylylcollagenic acid 1, lysine oleoylmethionate 2, zinc palmitoylchollagenate 1, palmitoylkeratinic acid 2, and excipient q.s. 100 g.
IT **152433-63-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compns. containing acyl- and lipo- amino acids for treatment of burns and wound)
RN 152433-63-1 CAPLUS
CN L-Lysine, compd. with N-[(9Z)-1-oxo-9-octadecenyl]-L-methionine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 51570-50-4
CMF C23 H43 N O3 S

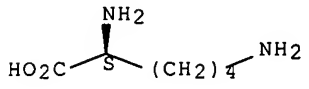
Absolute stereochemistry.
Double bond geometry as shown.



CM 2

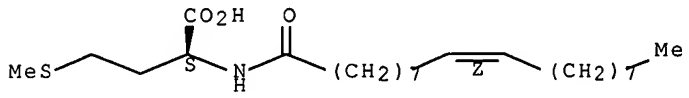
CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.



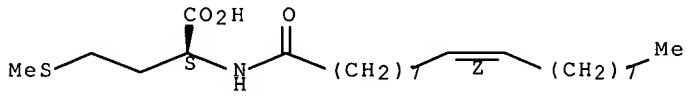
IT **51570-50-4 51570-50-4D**, zinc complexes
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(pharmaceutical compns. containing acyl- and lipo- amino acids for treatment of burns and wound)
RN 51570-50-4 CAPLUS
CN L-Methionine, N-[(9Z)-1-oxo-9-octadecenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 51570-50-4 CAPLUS
CN L-Methionine, N-[(9Z)-1-oxo-9-octadecenyl]- (9CI) (CA INDEX NAME)

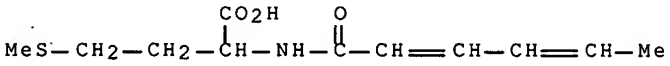
Absolute stereochemistry.
Double bond geometry as shown.



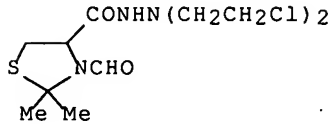
L89 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:158971 CAPLUS Full-text
DOCUMENT NUMBER: 112:158971
TITLE: Preparation of N-acyl-D-amino acids as **antimicrobials** for manufactured or processed foods
INVENTOR(S): Paquet, Alenka; Rayman, Khalil
PATENT ASSIGNEE(S): Canada, Minister of Agriculture, Can.; Canada, Minister of Health and Welfare
SOURCE: Can., 24 pp.
CODEN: CAXXA4
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1261855	A1	19890926	CA 1986-506396	19860411

PRIORITY APPLN. INFO.: CA 1986-506396 19860411
OTHER SOURCE(S): MARPAT 112:158971
ED Entered STN: 28 Apr 1990
AB N-Acylamino acids RCONHY (I; RCO = acyl; NHY = D-amino acid moiety or Gly-OH) other than H-Gly-D-Ala-OH, Ac-D-Trp-OH, Ac-D-Met-OH, Ac-D-Val-OH, and Ac-D-Ala-OH, useful as food preservatives, preferentially in combination with the min. amount of $NaNO_2$, for controlling, e.g. Clostridium botulinum, were prepared Thus, to a suspension of D-tryptophan and $NaHCO_3$ in aqueous Me_2CO was added succinimidyl sorbate (preparation given) in 3 portions and the resulting mixture was stirred overnight at room temperature to give 87% N-sorbyl-D-tryptophan (II). II among 8 I prepared, showed the greatest inhibition of spore growth against C. botulinum and had no mutagenicity against Salmonella typhimurium.
IT **110625-67-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as **antimicrobial** for food)
RN 110625-67-7 CAPLUS
CN D-Methionine, N-(1-oxo-2,4-hexadienyl)-, (E,E)- (9CI) (CA INDEX NAME)



L89 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:199003 CAPLUS Full-text
DOCUMENT NUMBER: 112:199003
TITLE: Synthesis and antitumor activity of N,N-di(2-chloroethyl)hydrazides of α-amino carboxylic acid antimetabolites
AUTHOR(S): Zakhariev, S.; Golovinski, E.; Stoev, S.; Maneva, L.; Aleksiev, B.
CORPORATE SOURCE: Inst. Mol. Biol., Sofia, 1113, Bulg.
SOURCE: Pharmazie (1989), 44(8), 542-4
CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 112:199003
ED Entered STN: 26 May 1990
GI

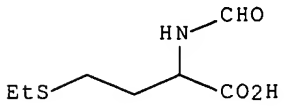


II

AB RC6H4CH2CH(NH2)CONHN(CH2CH2Cl)2.HBr (DL-I, R = 4-F, 3-F, 2-F), I (R = 4-NO2), H-Met(O)-NHN(CH2CH2Cl)2.HCl, and DL-H2NCH(CH2CH2SEt)CONHN(CH2CH2Cl)2.HCl were

prepared by the condensation of Nα-protected amino acids with H2NN(CH2CH2Cl)2 by DCC followed by deblocking the Nα-protective group. Thiazolidinecarboxylic acid II was also prepared These compds. have a high antitumor effect (80-100%) on Yoshida sarcoma and Walker carcinosarcoma.

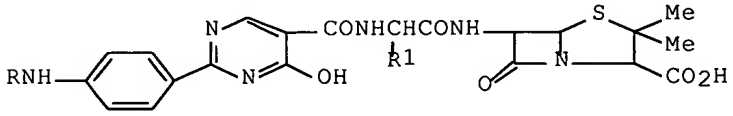
IT **126872-00-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with bis(chloroethyl)hydrazine)
RN 126872-00-2 CAPLUS
CN Homocysteine, S-ethyl-N-formyl- (9CI) (CA INDEX NAME)



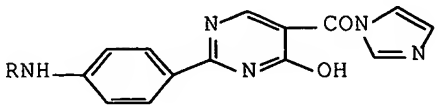
L89 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:142879 CAPLUS Full-text
DOCUMENT NUMBER: 96:142879
TITLE: **Antibacterial** amide compounds
INVENTOR(S): Haskell, Theodore H.; Hutt, Marland P., Jr.; Nicolaides, Ernest D.
PATENT ASSIGNEE(S): Warner-Lambert Co., USA
SOURCE: U.S., 14 pp. Cont.-in-part of U.S. Ser. No. 19,984, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4267180	A	19810512	US 1980-117318	19800131
PRIORITY APPLN. INFO.:			US 1979-19984 A2	19790312

OTHER SOURCE(S): CASREACT 96:142879; MARPAT 96:142879
ED Entered STN: 12 May 1984
GI



I



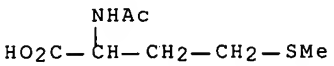
III

AB Amoxicillins I (R = N-acylglycyl, N-acylalanyl, N-acylisobutyryl, N-acylprolyl, N-acylmethionyl, N-acylvalyl, N-acylleucyl, N-acylglutaminyl, N-acyltyrosyl; R1 = Ph, 4-HOC6H4, 2-thienyl, 1,4-cyclohexadienyl), useful as bactericides, were prepared by treating amoxicillin (II) with imidazolide III.

Thus, treating II Me2SO complex in DMF with III (R = N-acetylglycyl) in the presence of Et3N 2.5 h at room temperature gave I (R = N-acetylglycyl, R1 = 4-HOC6H4), isolated as the Na salt.

IT **1115-47-5D**, mixed anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of hydroxypyrimidinecarboxylic acid derivative)

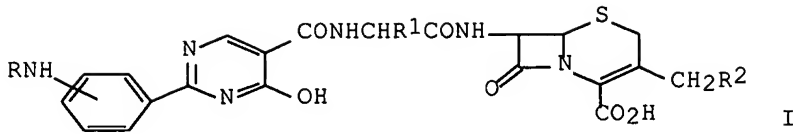
RN 1115-47-5 CAPLUS
CN Methionine, N-acetyl- (9CI) (CA INDEX NAME)



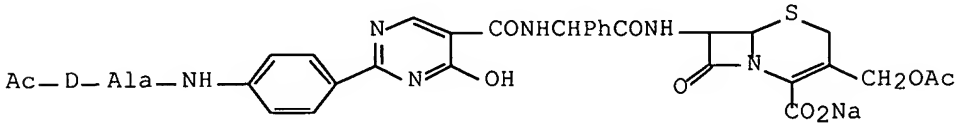
L89 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:121570 CAPLUS Full-text
DOCUMENT NUMBER: 94:121570
TITLE: N-(2[(Acylaminoacylamino or aminoacylamino)phenyl)-4-hydroxy-5-pyrimidinylcarbonyl]cephalosporin compounds and compositions containing them
INVENTOR(S): Haskell, Theodore Herbert; Mich, Thomas Frederick; Sanchez, Joseph Peter; Schweiss, Dietrich
PATENT ASSIGNEE(S): Warner-Lambert Co., USA
SOURCE: Eur. Pat. Appl., 81 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 15772	A1	19800917	EP 1980-300737		19800311
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE					
US 4311699	A	19820119	US 1980-112656		19800131
JP 55147291	A	19801117	JP 1980-31476		19800311
PRIORITY APPLN. INFO.:			US 1979-19992	A	19790312
			US 1980-112656	A	19800131

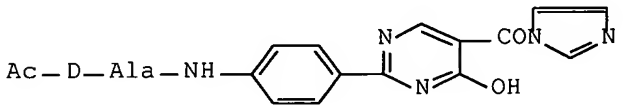
OTHER SOURCE(S): MARPAT 94:121570
ED Entered STN: 12 May 1984
GI



I



II



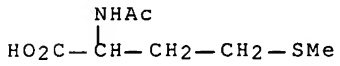
III

AB Cephalosporins I (R = amino acid or peptide residue; R1 = Ph, 4-HOC6H4, 2-thienyl, 1,4-cyclohexadienyl; R2 = OAc, O2CNH2, heterocyclylthio) were prepared Thus II was prepared by treating cephaloglycine with imidazolide III and NaOH. III was prepared by treating 4-H2NC6H4C(:NH)NH2.2HCl with EtOCH:C(CO2Et)2, acylating the resulting aminophenylpyrimidinecarboxylic acid with Ac-D-Ala-OH, and converting to the imidazolide. II had a min. inhibitory concentration against Pseudomonas of 3.1 μg/mL.

IT **1115-47-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of aminophenylpyrimidinecarboxylic acid by)

RN 1115-47-5 CAPLUS

CN Methionine, N-acetyl- (9CI) (CA INDEX NAME)



L89 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:450986 CAPLUS Full-text

DOCUMENT NUMBER: 91:50986

TITLE: Studies on the inhibitory effects of N-acylamino acid and its analog for the pathogenic fungus and bacteria in various plants

AUTHOR(S): Takano, Saburo

CORPORATE SOURCE: Dep. Agric. Chem., Tokyo Univ. Agric., Tokyo, Japan

SOURCE: Memoirs of the Tokyo University of Agriculture (1978), 20, 51-73
CODEN: TOAMB6; ISSN: 0372-0322

DOCUMENT TYPE: Journal

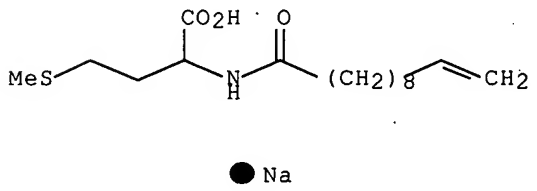
LANGUAGE: English

ED Entered STN: 12 May 1984

AB N-acyl amino acids were synthesized and their inhibitory effects on pathogenic fungi studied. N-Benzoyl-L-leucine (I) [1466-83-7] and N-phenylacetyl-L-leucine [730-15-4] at 10 mM inhibited the growth of Rhizoctonia solani and N-benzoyl-L-methionine [**10290-61-6**] and N-phenoxyacetyl-L-leucine [14231-46-0] inhibited proliferation of Pyricularia orzae. I inhibited the proliferation of Gloeosporium musarum and Alternaria kikuchiana. Nα-cocoyl-L-arginine Et

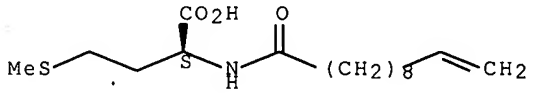
water 355.2 g to a mixture of petrolatum 225.0, stearyl alc. 198.0, propylene glycol 108.0, Et p-hydroxybenzoate 0.2, and Pr p-hydroxybenzoate 0.1g.

IT **54301-27-8**
RL: BIOL (Biological study)
(for skin ointment)
RN 54301-27-8 CAPLUS
CN Methionine, N-(1-oxo-10-undecenyl)-, monosodium salt (9CI) (CA INDEX NAME)



IT **54301-29-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and **antimicrobial** activity of)
RN 54301-29-0 CAPLUS
CN L-Methionine, N-(1-oxo-10-undecenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L89 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:119599 CAPLUS Full-text
DOCUMENT NUMBER: 82:119599
TITLE: **Bactericidal** and fungicidal acylamino acids
INVENTOR(S): Astruc, Jean; Lauzanne-Morelle, Eliane; Morelle, Jean
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

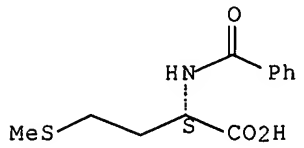
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2415750	A1	19741024	DE 1974-2415750	19740401
FR 2224169	A1	19741031	FR 1973-12050	19730404
PRIORITY APPLN. INFO.:			FR 1973-12050 A	19730404

ED Entered STN: 12 May 1984
AB Caprylylmethionine [**35440-75-6**], caprylylglycine [14246-53-8], caprylylhydroxyproline [54704-24-4], and lauroylglycine [7596-88-5] had bactericidal, fungicidal, and virucidal effects.
IT **35440-75-6**
RL: PRP (Properties)

ester-D,L-2-pyrrolidone 5-carboxylic acid salt (II) at 10 μg/mL controlled (96.4%) Uromyces fabae and had a broader and more significant inhibitory effect on spore germination. I or II (100 μg/mL) inhibited G. musarum on banana. II inhibited the growth of Botrytis fabae, Gymnosporangium haraeanum, Venturia nashicola, and A. kikuchiana in pears. II 500-1000, Cu hydroxide chloride 1470, and 8-hydroxyquinolinatocopper [10380-28-6] 772 μg/mL inhibited Pseudoperonospora cubensis, Sphaerotheca fuligina, and Pseudomonas lachrymans in cucumber. The inhibitory mechanism of II on the growth of pathogenic bacilli includes leakage of biotin, glucose, ATP, and protein from the bacilli.

IT **10290-61-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and **bactericidal** and fungicidal properties of)
RN 10290-61-6 CAPLUS
CN L-Methionine, N-benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



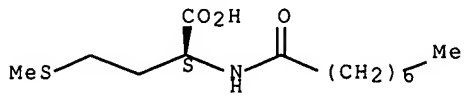
L89 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:103149 CAPLUS Full-text
DOCUMENT NUMBER: 82:103149
TITLE: Undecylenoyl amino acids for the treatment of skin disorders
INVENTOR(S): Nagasawa, Taro; Kiyosawa, Isao; Kawase, Kozo; Suzuki, Takashi; Kawashiri, Akio
PATENT ASSIGNEE(S): Morinaga Milk Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49093521	A	19740905	JP 1973-4731	19730108
JP 52033168	B	19770826		

PRIORITY APPLN. INFO.: JP 1973-4731 A 19730108
ED Entered STN: 12 May 1984
AB Therapeutic agents for the treatment of skin disorders are prepared by reacting undecyl-10-enic acid chloride [38460-95-6] with amino acids. N-undecyl-10-enoylglycine [54301-26-7], -alanine [54350-45-7], -cystine [17125-36-9], -methionine [**54301-29-0**], -proline [54301-30-3], -glutamic acid [54350-44-6], -serine [54350-42-4], and -valine [54301-31-4] are tested for their antimicrobial activities. Unlike undecylenic acid, undecylenoyl amino acids are free of unpleasant odor and produce no irritation when applied to the skin. Thus, N-undecyl-10-enoyl-D,L-methionine was dispersed in water and mixed with NaHCO3 to obtain Na N-undecyl-10-enoyl-DL-methioninate (I) [**54301-27-8**]. A hydrophilic ointment was prepared by adding I 50.0, Na N,N-diundecylenoyl-L-cystinate [54301-28-9] 50.0, Na lauryl sulfate 13.5, and

(**bactericidal** and fungicidal and virucidal activity of)
RN 35440-75-6 CAPLUS
CN L-Methionine, N-(1-oxooctyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



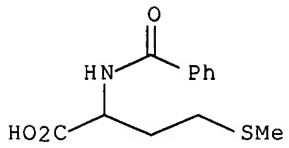
L89 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1966:10768 CAPLUS Full-text
DOCUMENT NUMBER: 64:10768
ORIGINAL REFERENCE NO.: 64:1904h,1905a-b
TITLE: Urinary antiseptics
INVENTOR(S): Galat, Alexander
SOURCE: 3 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3209002		19650928	US 1962-244928	19621217
PRIORITY APPLN. INFO.:			US	19621217

ED Entered STN: 22 Apr 2001
AB Hexamethylenetetramine bis[α-acylamino-γ-(methylmercapto)- butyrates] (N-acylmethionine methenamine compds.) are useful as urinary antiseptics. The compds. are excreted in the urine as an acid sulfate of methenamine at pH <6. A mixture of 19.1 g. N-acetyl-dl-methionine and 7.0 g. methenamine in 130 mL. CHCl3 is refluxed until dissolved, 150 toluene added, the solution cooled, and the crystals filtered, washed, and dried. The N-acetyl-dl-methionine methenamine thus obtained in 88% yield, m. 125-6° and has a neutral equivalent of 264; it forms white crystals which are stable in air and very soluble in water. The N-benzoyl derivative, prepared similarly, m. .apprx.110°.
IT **6873-24-1**, Hexamethylenetetramine, compound with (±)-N-benzoylmethionine (1:2) **886993-81-3**, Hexamethylenetetramine, compound with (±)-N-benzoylmethionine (1:1) **886993-82-4**, Hexamethylenetetramine, compound with (±)-N-acetylmethionine (1:2)
(as urinary tract **bactericide**)
RN 6873-24-1 CAPLUS
CN Methionine, N-benzoyl-, compd. with hexamethylenetetramine (2:1), DL- (8CI) (CA INDEX NAME)

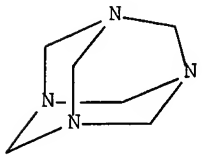
CM 1

CRN 4703-38-2
CMF C12 H15 N O3 S



CM 2

CRN 100-97-0
CMF C6 H12 N4

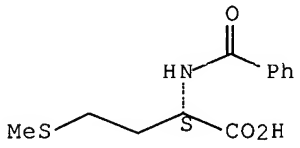


RN 886993-81-3 CAPLUS
CN L-Methionine, N-benzoyl-, compd. with 1,3,5,7-tetraazatricyclo[3.3.1.13,7]decane (1:1) (9CI) (CA INDEX NAME)

CM 1

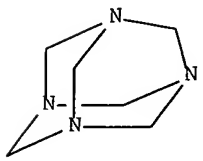
CRN 10290-61-6
CMF C12 H15 N O3 S

Absolute stereochemistry.



CM 2

CRN 100-97-0
CMF C6 H12 N4

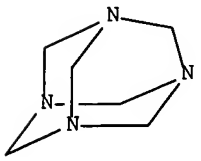


RN 886993-82-4 CAPLUS

CN L-Methionine, N-acetyl-, compd. with 1,3,5,7-tetraazatricyclo[3.3.1.13,7]decane (1:1) (9CI) (CA INDEX NAME)

CM 1

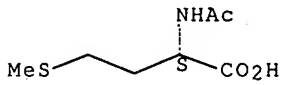
CRN 100-97-0
CMF C6 H12 N4



CM 2

CRN 65-82-7
CMF C7 H13 N O3 S

Absolute stereochemistry.



L89 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1957:47276 CAPLUS
DOCUMENT NUMBER: 51:47276
ORIGINAL REFERENCE NO.: 51:8805b-d
TITLE: 1-Nitroso-2-imidazolone
INVENTOR(S): Michels, Julian G.
PATENT ASSIGNEE(S): Norwich Pharmacal Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2776979		19570108	US 1956-576236	19560405
GB 853498			GB	

ED Entered STN: 22 Apr 2001

AB The title compound (I) is useful as an intermediate in the preparation of the corresponding 1-amino compound, which in turn is used in the synthesis of N-(5-nitro-2-furfurylidene)-1-amino-2-imidazolone (II). To 4.2 g. imidazolone in 50 cc. N HCl was added slowly with stirring at 0° 3.5 g. NaNO2, the suspension stirred 1 hr., the precipitate filtered off, and washed with cold H2O to give 3.6 g. I, crystalline solid, m. 95° (decomposition) I (3.6 g.) dissolved in 150 cc. 10% HCl, the solution cooled to 0°, treated portionwise with 4.4 g. Zn dust while maintaining the temperature at 10°, the temperature allowed to rise to 20°, excess Zn filtered off, the filtrate treated with 5-nitro-2-furaldehyde, and the precipitate filtered off, washed with H2O, EtOH,

and Et2O, and dried gave 4.75 g. II, recrystd. from MeNO2 with C, m. 261-3° (decomposition).

IT **113894-97-6P**, Aminopyrine, compound with N-acetylmethionine
RL: PREP (Preparation)
(preparation of)

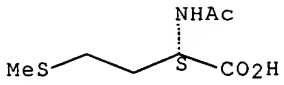
RN 113894-97-6 CAPLUS

CN Methionine, N-acetyl-, compd. with aminopyrine (1:1), L- (6CI) (CA INDEX NAME)

CM 1

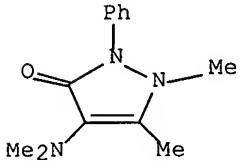
CRN 65-82-7
CMF C7 H13 N O3 S

Absolute stereochemistry.



CM 2

CRN 58-15-1
CMF C13 H17 N3 O



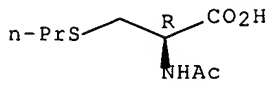
L89 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1948:19336 CAPLUS Full-text
DOCUMENT NUMBER: 42:19336
ORIGINAL REFERENCE NO.: 42:4136g-i,4137a-i
TITLE: Allium compounds. I. Alliine, the true mother compound of garlic oil
AUTHOR(S): Stoll, Arthur; Seebeck, Ewald
CORPORATE SOURCE: "Sandoz", Basel, Switz.
SOURCE: Helvetica Chimica Acta (1948), 31, 189-210
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German
ED Entered STN: 22 Apr 2001
AB cf. C.A. 41, 4893a. The enzymic cleavage of the genuine base, alliine (I), of garlic oil to the intermediate allicine (II) is followed by decomposition into the volatile, unpleasantly odorous (CH2:CHCH2)2S (III). The I content of Allium sativum is approx. parallel to the S content and both vary greatly according to the origin of the plant. Fresh bulbs (1 kg.) frozen in CO2 were finely ground, suspended in 3 l. MeOH, warmed to 10° 1 hr., and filtered. The filtrate and washings (4 l. of 80% MeOH) were concentrated in vacuo to 200 cc.

and defatted with ether. The bright yellow dry residue (62 g.) contained about 6% organic S. The residue (20 g.) in 80 cc. H2O was vigorously stirred with 600 cc. alc. After standing 12 hrs. the sirupy residue was separated and dried in vacuo to a very hygroscopic powder (16 g.) which was digested in 150 cc. of ice-cold MeOH. The insol. fraction, washed with absolute MeOH and ether and dried over H2SO4, gave 7 g. of a white nonhygroscopic H2O-soluble powder containing 11% organic S. The addition of 48 cc. acetone to 2 g. powder in 20 cc. H2O produced 810 mg. I, fine needles, m. 163.5° (decomposition), [α]D21 62.7°, reduced in the presence of Raney Ni catalyst by saturation of the CH2:CHCH2 group to the corresponding dihydroalliine (IV), C6H13NO3S, m. 164-8°, [α]D22 33.0° (c 1.0, H2O). In contrast to II (C.A. 39, 323.9) I shows no antibacterial activity in the staphylococcal cup-plate test, though activity appears on cleavage with alliinase. Potentiometric titration showed I to be amphoteric. I gives a red color with alloxan and a pos. ninhydrin reaction. A Van Slyke determination showed the presence of an NH2 group. Cold alkaline I gave no red color with Na2Fe(CN)5NO or with Grote's reagent (C.A. 25, 5876). On heating 2 min. a red color appeared, indicating the presence in I of S in an oxidized state. I oxidizes cysteine, H2S, and AcSH, compds. containing free HS groups. I (2 g.) was shaken 2 hrs. with 5 cc. AcOH and 3 cc. AcSH. After 20 hrs. the crystallization of free S was complete. Working up of the filtrate and recrystn. from MeOH and ether yielded 2 g. of L-S-allyl-N-acetylcysteine (V), C8H13NO3S, m. 120-2°, [α]D21 -34.0° (c 1.0, MeOH), cleaved by alkaline hydrolysis to NH3, AcOH, AcCO2H, and CH2: CHCH2SH (as shown by the formation of PrSH from the alkaline hydrolysis of L-S-propyl-N- acetylcysteine). The constitution of V was further demonstrated by synthesis from L-cysteine. The dry double salt from 2.4 g. L-cysteine-HCl and 8 g. HgCl2 in 50 cc. alc. was treated with 30 g. CH2:CHCH2Br at 60° 30 min. and the product was poured into 150 cc. H2O. The excess CH2:CHCH2Br was extracted with ether and the alc. removed by evaporation to 50 cc. in vacuo. The crude concentrate in 50 cc. H2O at 70° was saturated with H2S 20 min. and the reaction mixture boiled, filtered, concentrated to 50 cc., and neutralized with NH4OH. After concentration and treating with excess absolute alc., the crude product, recrystd. from 6 cc. of 50% alc., yielded 670 mg. leaflets of L-S-allylcysteine (desoxoalliine) (VI), C6H11NO2S, m. 218-19°, [α]D21 -16.0° (c 1.0, H2O), identical with VI prepared by reducing I with Na2S2O5. Accordingly, I may be regarded as an S-allylcysteine sulfoxide, CH2:CHCH2SOCH2CH(NH2)CO2H, crystallizing with 0.5 H2O. For chemical characterization were prepared N-acetylalliine brucine salt, C31H39N3O8S, m. 188-98° (decomposition), [α]D21 -29.0°; N-benzoylalliine, C13H15NO4S, m. 152-3.5°, [α]D20 -6.0° (c 1,MeOH); N-(p-nitrobenzoyl)alliine, C13H14N2O6S, m. 180-2° (decomposition), [α]D20 -9.0° (c 1.0, 0.1 N NaOH) (Me ester, m. 140-3°). I (1.1 g.) in 8 cc. H2O and 3 cc. of 2 N NaOH was shaken vigorously 15 min. with 0.44 cc. PhNCS and the filtered solution acidified with dilute HCl to Congo red. Recrystn. from alc. yielded 1.45 g. prismatic (anilinoformyl)alliine, C13H16N2O4S, m. 141-3° (decomposition), [α]D21 76.0° (c 1, MeOH), hydrolyzed by 2 N NaOH at room temperature to PhNHCONH2 and AcCO2H, and catalytically reduced in MeOH in the presence of Raney Ni to (anilinoformyl)dihydroalliine, C13H18N2O4S, m. 157.0-8.5°, [α]D21 44.0° (c 1.0, MeOH), also prepared from PhNCS and IV. The H2O2 oxidation of the model substance, (CH2:CHCH2)2S, to the corresponding sulfoxide shows that S combined with an allyl group has a greater tendency to oxidation than the unsatd. linkage. The oxidation of 500 mg. VI in 8 cc. AcOH with 0.3 cc. of 36% H2O2 at 10° 1 hr. and at room temperature 5 hrs. gave, on working up in acetone, an S-allylcysteine sulfoxide (Ia), C6H11NO3S.0.5H2O, m. 146-8° (decomposition), [α]D20 -12.0° (c 1.0, H2O), in contrast to I, m. 163-5°, [α]D21 52.7°. According to Phillips (C.A. 20, 397, sulfoxides of this type have a semipolar linkage and consequently Ia differs from I in containing a new asym. center at the S atom which exists in the racemic form. Oxidation of L-S-propylcysteine (prepared

from L-cysteine-HBr and PrBr in 2 N NaOH and alc. at 25°) with 36% H2O2 and crystallization from dilute acetone yielded fine needles of a similarly S-racemic IV, m. 150-3°, [α]D20 -12.0° (c 1.0, H2O). Attempts to resolve Ia into its active components are in progress.

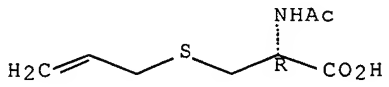
IT **14402-54-1**, Alanine, N-acetyl-3-(propylthio)-
(hydrolysis of)
RN 14402-54-1 CAPLUS
CN L-Cysteine, N-acetyl-S-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **23127-41-5P**, Alanine, N-acetyl-3-(allylthio)-, L-
RL: PREP (Preparation)
(preparation of)
RN 23127-41-5 CAPLUS
CN L-Cysteine, N-acetyl-S-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L89 ANSWER 28 OF 39 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:629344 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600634665
TITLE: Application of 2-hydroxy-4-(methylthio)butanoic acid (HMTBa) containing ACTIVATE((R))nutritional feed acid blends in the nursery pig feeding program of North America.
AUTHOR(S): Yi, G. F. [Reprint Author]; Knight, C. D.; Schasteen, C. S.; Wu, J.; Perryman, K. R.
CORPORATE SOURCE: Novus Int Inc, St Charles, MO USA
SOURCE: Journal of Animal Science, (2006) Vol. 84, No. Suppl. 2, pp. 77-78.
Meeting Info.: Midwest Meeting of the American-Society-of-Animal-Science/American-Dairy-Science-Association. Des Moines, IA, USA. March 20 -22, 2006. Amer Soc Anim Soc; Amer Diary Sci Assoc.
CODEN: JANSAG. ISSN: 0021-8812.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Nov 2006
Last Updated on STN: 22 Nov 2006
CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520

Pathology - Therapy 12512
Nutrition - General studies, nutritional status and methods 13202
Pharmacology - General 22002
Animal production - General and methods 26502
Animal production - Feeds and feeding 26504
Physiology and biochemistry of bacteria 31000
Chemotherapy - General, methods and metabolism 38502

INDEX TERMS: Major Concepts
Pharmacology; Nutrition; Animal Husbandry (Agriculture)

INDEX TERMS: Chemicals & Biochemicals
antibiotics: antiinfective-drug; 2-hydroxy-4-methylthiobutanoic acid: food supplement

INDEX TERMS: Miscellaneous Descriptors
growth promotion; feeding program; **antibacterial** activity; nutritional feed

GEOGRAPHICAL TERMS: North America (Nearctic region)

ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Escherichia coli (species)
Salmonella typhimurium (species)
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM: Classifier
Suidae 85740
Super Taxa
Artiodactyla; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
pig (common)
Taxa Notes
Animals, Artiodactyls, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

REGISTRY NUMBER: **583-91-5** (2-hydroxy-4-methylthiobutanoic acid)
REGISTRY RECORDS FOR HITS FROM BIOSIS PRINTED BEGINNING ON PAGE 86

L89 ANSWER 29 OF 39 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:382931 BIOSIS Full-text
DOCUMENT NUMBER: PREV200510157870
TITLE: Development and validation of a whole-cell inhibition assay for bacterial methionine aminopeptidase by surface-enhanced laser desorption ionization-time of flight mass spectrometry.
AUTHOR(S): Greis, Kenneth D. [Reprint Author]; Zhou, Songtao; Siehnel, Richard; Klanke, Chuck; Curnow, Alan; Howard, Jeremy; Layh-Schmitt, Gerlinde
CORPORATE SOURCE: Procter and Gamble Pharmaceut, Hlth Care Res Ctr, 8700 Mason Montgomery Rd, Mason, OH 45040 USA
greis.kd@pg.com
SOURCE: Antimicrobial Agents and Chemotherapy, (AUG 2005) Vol. 49, No. 8, pp. 3428-3434.
CODEN: AMACCQ. ISSN: 0066-4804.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 21 Sep 2005
Last Updated on STN: 21 Sep 2005

ABSTRACT:Bacterial methionine aminopepticlase (MA-P) is a protease that removes methionine from the N termini of newly synthesized bacterial proteins after the peptide deformylase enzyme cleaves the formyl group from the initiator formylmethionine. MAP is an essential bacterial gene product and thus represents a potential target for therapeutic intervention. A fundamental challenge in the **antibacterial** drug discovery field is demonstrating conclusively that compounds with in vitro enzyme inhibition activity produce the desired **antibacterial** effect by interfering with the same target in whole bacterial cells. One way to address the activity of inhibitor compounds is by profiling cellular biomarkers in whole bacterial cells using compounds that are known inhibitors of a particular target. However, in the case of MAP, no specific inhibitors were available for such studies. Instead, a genetically attenuated MAP strain was generated in which MAP expression was placed under the control of an inducible arabinose promoter. Thus, MA-P inhibition in whole cells could be mimicked by growth in the absence of arabinose. This genetically attenuated strain was used as a benchmark for MAP inhibition by profiling whole-cell lysates for unprocessed proteins using surface-enhanced laser desorption ionization-time of flight mass spectrometry (MS). Eight proteins between 4 and 14 kDa were confirmed as being unprocessed and containing the initiator methionine by adding back purified MAP to the preparations prior to MS analysis. Upon establishing these unprocessed proteins as biomarkers for MAP inhibition, the assay was used to screen small-molecule chemical inhibitors of purified MAP for whole-cell activity. Fifteen compound classes yielded three classes of compound with whole-cell activity for further optimization by chemical expansion. This report presents the development, validation, and implementation of a whole-cell inhibition assay for MAP.

CONCEPT CODE: Enzymes - General and comparative studies: coenzymes 10802

INDEX TERMS: Major Concepts
Methods and Techniques; Enzymology (Biochemistry and Molecular Biophysics)

INDEX TERMS: Chemicals & Biochemicals
peptide deformylase [EC 3.5.1.88]; methionine aminopeptidase [EC 3.4.11.18]; formylmethionine

INDEX TERMS: Methods & Equipment
surface-enhanced laser desorption ionization-time of flight mass spectrometry: laboratory techniques, spectrum analysis techniques; whole-cell inhibition assay: laboratory techniques

INDEX TERMS: Miscellaneous Descriptors
therapeutic intervention; enzyme inhibition activity

REGISTRY NUMBER: 369636-51-1 (peptide deformylase)
369636-51-1 (EC 3.5.1.88)
61229-81-0 (methionine aminopeptidase)
61229-81-0 (EC 3.4.11.18)
4289-98-9 (formylmethionine)

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ACCESSION NUMBER: 2005:426573 BIOSIS Full-text

DOCUMENT NUMBER: PREV200510229260

TITLE: **Antibacterial** activity of Alimet feed supplement evaluated by a low pH in-feed method.

AUTHOR(S): Wu, J.; Schasteen, C. S.

SOURCE: Poultry Science, (OCT 2004) Vol. 83, No. 10, pp. 1769. CODEN: POSCAL. ISSN: 0032-5791.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 26 Oct 2005
Last Updated on STN: 26 Oct 2005
CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Biochemistry studies - General 10060
Biochemistry studies - Lipids 10066
Pathology - Therapy 12512
Nutrition - General studies, nutritional status and methods 13202
Digestive system - Physiology and biochemistry 14004
Pharmacology - General 22002
Toxicology - General and methods 22501
Toxicology - Pharmacology 22504
Physiology and biochemistry of bacteria 31000
Chemotherapy - General, methods and metabolism 38502
Chemotherapy - Antibacterial agents 38504
INDEX TERMS: Major Concepts
Pharmacology; Infection; Methods and Techniques; Nutrition
INDEX TERMS: Parts, Structures, & Systems of Organisms
proventriculus: digestive system
INDEX TERMS: Diseases
Salmonella food poisoning: bacterial disease, toxicity, drug therapy
INDEX TERMS: Chemicals & Biochemicals
lactic acid; formic acid; propionic acid; butyric acid; nalidixic acid; Alimet [DL-2-hydroxy-4-(methylthio)-butanoic acid]: **antibacterial**-drug, antiinfective-drug, dietary supplement
INDEX TERMS: Methods & Equipment
low pH in-feed method: applied and field techniques
ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Salmonella typhimurium (species): contaminant
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: 50-21-5 (lactic acid)
64-18-6 (formic acid)
79-09-4 (propionic acid)
107-92-6 (butyric acid)
389-08-2 (nalidixic acid)
583-91-5 (Alimet)
583-91-5 (DL-2-hydroxy-4-(methylthio)-butanoic acid)

L89 ANSWER 31 OF 39 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:500370 BIOSIS Full-text
DOCUMENT NUMBER: PREV200300502441
TITLE: Structure-based design of a macrocyclic inhibitor for peptide deformylase.
AUTHOR(S): Hu, Xubo; Nguyen, Kiet T.; Verlinde, Christophe L. M. J.; Hol, Wim G. J.; Pei, Dehua [Reprint Author]
CORPORATE SOURCE: Department of Chemistry and Ohio State Biochemistry Program, The Ohio State University, 100 West 18th Avenue, Columbus, Ohio, 43210, USA

pei.3@osu.edu
SOURCE: Journal of Medicinal Chemistry, (August 28 2003) Vol. 46, No. 18, pp. 3771-3774. print.
ISSN: 0022-2623 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Oct 2003
Last Updated on STN: 29 Oct 2003
ABSTRACT:A macrocyclic, peptidomimetic inhibitor of peptide deformylase was designed by covalently cross-linking the P1' and P3' side chains. The macrocycle, which contains an N-formylhydroxylamine side chain as the metal-chelating group, was synthesized from a diene precursor via olefin metathesis using Grubbs's catalyst. The cyclic inhibitor showed potent inhibitory activity toward Escherichia coli deformylase (KI = 0.67 nM) and ***antibacterial*** activity against both Gram-positive and Gram-negative bacteria (MIC = 0.7-12 mug/mL).
CONCEPT CODE: Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Minerals 10069
Enzymes - General and comparative studies: coenzymes 10802
Physiology and biochemistry of bacteria 31000
INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics)
INDEX TERMS: Chemicals & Biochemicals
N-formylmethionine; cobalt ion; iron ion; macrocyclic peptide deformylase inhibitor: structure-based design; methionine aminopeptidase [EC 3.4.11.18]; nickel ion; peptide deformylase [EC 3.5.1.88]
INDEX TERMS: Miscellaneous Descriptors
N-terminal processing
ORGANISM: Classifier
Bacteria 05000
Super Taxa
Microorganisms
Organism Name
Gram-negative bacteria (common)
Gram-positive bacteria (common)
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Escherichia coli (species)
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: **4289-98-9** (N-formylmethionine)
22541-53-3 (cobalt ion)
61229-81-0 (methionine aminopeptidase)
61229-81-0 (EC 3.4.11.18)
14701-22-5 (nickel ion)
369636-51-1 (peptide deformylase)
369636-51-1 (EC 3.5.1.88)

L89 ANSWER 32 OF 39 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:45192 BIOSIS Full-text

DOCUMENT NUMBER: PREV200300045192
TITLE: 2D-QSAR in hydroxamic acid derivatives as peptide deformylase inhibitors and **antibacterial** agents.
AUTHOR(S): Gupta, Manish K.; Mishra, Pradeep; Prathipati, Philip; Saxena, Anil K. [Reprint Author]
CORPORATE SOURCE: Medicinal Chemistry Division, Central Drug Research Institute, Lucknow, 226001, India
anilsak@hotmail.com
SOURCE: Bioorganic & Medicinal Chemistry, (December 2002) Vol. 10, No. 12, pp. 3713-3716. print.
ISSN: 0968-0896 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003
ABSTRACT: Peptide deformylase catalyzes the removal of N-formyl group from the N-formylmethionine of ribosome synthesized polypeptide in eubacteria. Quantitative structure-activity relationship (QSAR) studies have been carried out in a series of beta-sulfonyl and beta-sulfinyl hydroxamic acid derivatives for their PDF enzyme inhibitory and **antibacterial** activities against Escherichia coli DC2 and Moraxella catarrhalis RA21 which demonstrate that the PDF inhibitory activity in cell free and whole cell system increases with increase in molar refractivity and hydrophobicity. The comparison of the QSARs between the cell free and whole cell system indicate that the active binding sites in PDF isolated from E. coli and in M. catarrhalis RA21 are similar and the whole cell anti-bacterial activity is mainly due to the inhibition of PDF. Apart from this the QSARs on some matrixmetelloproteins (COL-1, COL-3, MAT and HME) and natural endopeptidase (NEP) indicate the possibilites of introducing selectivity in these hydroxamic acid derivatives for their PDF inhibitory activity.
CONCEPT CODE: Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Therapy 12512
Pharmacology - General 22002
Physiology and biochemistry of bacteria 31000
INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Pharmacology
INDEX TERMS: Parts, Structures, & Systems of Organisms
ribosomes
INDEX TERMS: Chemicals & Biochemicals
N-formylmethionine; **antibacterial** agents: activities, applications, pharmaceutical, synthesis; endopeptidase; enzyme inhibitors: activities, applications, pharmaceutical, synthesis; enzymes; hydroxamic acid derivatives: analysis, molecular properties, pharmaceutical, pharmacological properties, synthesis; matrix metalloproteins; peptide deformylase [EC 3.5.1.88]: activities, inhibitors; polypeptides; proteins
INDEX TERMS: Methods & Equipment
quantitative structure-activity relationships: laboratory techniques
INDEX TERMS: Miscellaneous Descriptors
bacterial physiology/biochemistry; drug targets; medicinal chemistry
ORGANISM: Classifier
Bacteria 05000

Super Taxa
Microorganisms
Organism Name
bacteria (common)
eubacteria (common)
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Escherichia coli (species): strain-DC2
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Neisseriaceae 06507
Super Taxa
Gram-Negative Aerobic Rods and Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Moraxella catarrhalis (species): strain-RA21
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: **4289-98-9** (N-formylmethionine)
9001-92-7 (endopeptidase)
369636-51-1 (peptide deformylase)
369636-51-1 (EC 3.5.1.88)

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ACCESSION NUMBER: 2003:66112 BIOSIS Full-text
DOCUMENT NUMBER: PREV200300066112
TITLE: Peptide deformylase inhibitors, potential for a new class of broad spectrum **antibacterials.**
AUTHOR(S): Clements, John M. [Reprint Author]; Ayscough, Andrew P.; Keavey, Kenneth; East, Stephen P.
CORPORATE SOURCE: British Biotech Pharmaceuticals Ltd., Watlington Road, Oxford, OX4 6LY, UK
clements@britbio.co.uk
SOURCE: Current Medicinal Chemistry - Anti-Infective Agents, (July 2002) Vol. 1, No. 3, pp. 239-249. print.
ISSN: 1568-0126 (ISSN print).
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Jan 2003
Last Updated on STN: 29 Jan 2003
CONCEPT CODE: Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Therapy 12512
Respiratory system - Physiology and biochemistry 16004
Respiratory system - Pathology 16006
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Physiology and biochemistry of bacteria 31000
Medical and clinical microbiology - General and methods

36001
Medical and clinical microbiology - Bacteriology 36002
Plant physiology - Respiration, fermentation 51508
Plant physiology - Enzymes 51518
Phytopathology - Diseases caused by bacteria 54504
Invertebrata: comparative, experimental morphology, physiology and pathology - Protozoa 64002
Invertebrata: comparative, experimental morphology, physiology and pathology - Aschelminthes 64016

INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics); Infection; Pharmacology

INDEX TERMS: Parts, Structures, & Systems of Organisms
lungs: respiratory system

INDEX TERMS: Diseases
bacterial infection: bacterial disease
Bacterial Infections (MeSH)

INDEX TERMS: Diseases
lung infection: infectious disease, respiratory system disease
Respiratory Tract Infections (MeSH)

INDEX TERMS: Chemicals & Biochemicals
BB-83698; N-formylmethionine; actinonin; antibiotics; bacterial polypeptides; broad spectrum **antibacterials**; methionine aminopeptidase [EC 3.4.11.18]; peptide deformylase [EC 3.5.1.88]: bacterial metalloenzyme, function, structure; peptide deformylase inhibitors

INDEX TERMS: Methods & Equipment
antimicrobial chemotherapy: clinical techniques, therapeutic and prophylactic techniques

INDEX TERMS: Miscellaneous Descriptors
bacterial polypeptide synthesis; drug discovery

ORGANISM: Classifier
Ascomycetes 15100
Super Taxa
Fungi; Plantae
Organism Name
Saccharomyces cerevisiae (species): pathogen
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

ORGANISM: Classifier
Bacteria 05000
Super Taxa
Microorganisms
Organism Name
Gram negative bacteria (common): pathogen
Gram positive bacteria (common): pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Escherichia coli (species): pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM: Classifier

Gram-Positive Cocci 07700
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Streptococcus pneumoniae (species): pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM:
Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common): host
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGANISM:
Classifier
Micrococcaceae 07702
Super Taxa
Gram-Positive Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Staphylococcus aureus (species): pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM:
Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse (common): host
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

ORGANISM:
Classifier
Nematoda 51300
Super Taxa
Aschelminthes; Helminthes; Invertebrata; Animalia
Organism Name
C. elegans (miscellaneous) [Caenorhabditis elegans (species)]: pathogen
Taxa Notes
Animals, Aschelminths, Helminths, Invertebrates

ORGANISM:
Classifier
Pasteurellaceae 06703
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Haemophilus influenzae (species): pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGANISM:
Classifier
Sporozoa 35400
Super Taxa
Protozoa; Invertebrata; Animalia
Organism Name
Plasmodium falciparum (species): pathogen
Taxa Notes
Animals, Invertebrates, Microorganisms, Protozoans

REGISTRY NUMBER: 428862-38-8 (BB-83698)
4289-98-9 (N-formylmethionine)
13434-13-4 (actinonin)
61229-81-0 (methionine aminopeptidase)
61229-81-0 (EC 3.4.11.18)
369636-51-1 (peptide deformylase)
369636-51-1 (EC 3.5.1.88)

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ACCESSION NUMBER: 2000:68553 BIOSIS Full-text
DOCUMENT NUMBER: PREV200000068553
TITLE: Oxazolidinones: A novel class of antibiotics.
AUTHOR(S): Mueller, M. [Reprint author]; Schimz, K.-L.
CORPORATE SOURCE: Institut fuer Biochemie und Molekularbiologie der Universitaet Freiburg, Hermann-Herder-Str. 7, D-79104, Freiburg, Germany
SOURCE: CMLS Cellular and Molecular Life Sciences, (Oct. 15, 1999) Vol. 56, No. 3-4, pp. 280-285. print.
ISSN: 1420-682X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Feb 2000
Last Updated on STN: 3 Jan 2002
ABSTRACT:Oxazolidinones are a novel class of synthetic **antimicrobial** agents which have now entered phase III clinical trials. The most promising feature of these compounds is their oral activity against multidrug-resistant Gram-positive bacteria which have created tremendous therapeutic problems in recent years. In addition, development of resistance in vitro has so far remained below detectable levels. Different from many **antibacterial** agents used in the treatment of human infections, oxazolidinones do not block bacterial protein synthesis at the level of polypeptide chain elongation but rather seem to interfere with initiation of translation. Both binding of formylmethionine-transfer RNA to initiation complexes as well as release of formylmethionine-puromycin from initiation complexes have been reported to be targets for oxazolidinones. The major binding sites of oxazolidinones are the large (50S) ribosomal subunits.
CONCEPT CODE: Chemotherapy - Antibacterial agents 38504
Biochemistry studies - General 10060
Genetics of bacteria and viruses 31500
Medical and clinical microbiology - Bacteriology 36002
INDEX TERMS: Major Concepts
Molecular Genetics (Biochemistry and Molecular Biophysics); Infection; Pharmacology
INDEX TERMS: Chemicals & Biochemicals
50S ribosome; formylmethionine; oxazolidinones: antibiotics, oral activity; protein: synthesis; tRNA [transfer RNA]
INDEX TERMS: Miscellaneous Descriptors
multi-drug resistance
ORGANISM: Classifier
Bacteria 05000
Super Taxa
Microorganisms
Organism Name
Gram-positive bacteria: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: **4289-98-9** (formylmethionine)
51667-26-6 (oxazolidinones)

L89 ANSWER 35 OF 39 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:53425 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900053425
TITLE: The oxazolidinone linezolid inhibits initiation of protein synthesis in bacteria.
AUTHOR(S): Swaney, Steve M.; Aoki, Hiroyuki; Ganoza, M. Clelia; Shinabarger, Dean L. [Reprint author]
CORPORATE SOURCE: Infectious Diseases Res., Pharmacia Upjohn Inc., 7000 Portage Rd., Kalamazoo, MI 49001-0199, USA
SOURCE: Antimicrobial Agents and Chemotherapy, (Dec., 1998) Vol. 42, No. 12, pp. 3251-3255. print.
CODEN: AMACCQ. ISSN: 0066-4804.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Feb 1999
Last Updated on STN: 10 Feb 1999

ABSTRACT:The oxazolidinones represent a new class of **antimicrobial** agents which are active against multidrug-resistant staphylococci, streptococci, and enterococci. Previous studies have demonstrated that oxazolidinones inhibit bacterial translation in vitro at a step preceding elongation but after the charging of N-formylmethionine to the initiator tRNA molecule. The event that occurs between these two steps is termed initiation. Initiation of protein synthesis requires the simultaneous presence of N-formylmethionine-tRNA, the 30S ribosomal subunit, mRNA, GTP, and the initiation factors IF1, IF2, and IF3. An initiation complex assay measuring the binding of (3H)N-formylmethionyl-tRNA to ribosomes in response to mRNA binding was used in order to investigate the mechanism of oxazolidinone action. Linezolid inhibited initiation complex formation with either the 30S or the 70S ribosomal subunits from Escherichia coli. In addition, complex formation with Staphylococcus aureus 70S tight-couple ribosomes was inhibited by linezolid. Linezolid did not inhibit the independent binding of either mRNA or N-formylmethionyl-tRNA to E. coli 30S ribosomal subunits, nor did it prevent the formation of the IF2-N-formylmethionyl-tRNA binary complex. The results demonstrate that oxazolidinones inhibit the formation of the initiation complex in bacterial translation systems by preventing formation of the N-formylmethionyl-tRNA-ribosome-mRNA ternary complex.

CONCEPT CODE: Pharmacology - General 22002
Biochemistry studies - General 10060
Bacteriology, general and systematic 30000
INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Pharmacology
INDEX TERMS: Chemicals & Biochemicals
initiation factor 1; initiation factor 2; initiation factor 3; initiator tRNA molecule; linezolid: oxazolidinone; mRNA [messenger RNA, messenger RNA]; GTP; N-formylmethionine; 30S ribosomal subunit; 70S ribosomal subunit
ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Organism Name
Escherichia coli: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Gram-Positive Cocci 07700

Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
Enterococcus faecium: pathogen
Streptococcus pneumoniae: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Micrococcaceae 07702
Super Taxa
Gram-Positive Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Staphylococcus aureus: pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: 165800-03-3 (linezolid)
86-01-1 (GTP)
4289-98-9 (N-formylmethionine)
51667-26-6 (OXAZOLIDINONE)

L89 ANSWER 36 OF 39 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2006-240164 [25] WPIX
DOC. NO. CPI: C2006-078544 [25]
TITLE: Prevention or alleviation of symptoms or syndromes associated with nervous, vascular, muscoloskeletal or cutaneous systems comprises sytemically administering a composition comprising an amino acid e.g. alanine, present as e.g. free acid
DERWENT CLASS: B05
INVENTOR: VAN SCOTT E J; YU R J
PATENT ASSIGNEE: (VSCO-I) VAN SCOTT E J; (YURJ-I) YU R J
COUNTRY COUNT: 110

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20060063827	A1	20060323	(200625)*	EN	10[0]	
WO 2006036634	A2	20060406	(200625)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20060063827	A1 Provisional	US 2004-612253P	20040923
US 20060063827	A1 Provisional	US 2004-627022P	20041112
US 20060063827	A1	US 2005-228230	20050919
WO 2006036634	A2	WO 2005-US33481	20050920

PRIORITY APPLN. INFO: US 2005-228230 20050919
US 2004-612253P 20040923
US 2004-627022P 20041112
INT. PATENT CLASSIF.:
IPC ORIGINAL: A61K0031-185 [I,C]; A61K0031-198 [I,A]; A61K0031-366 [I,A]; A61K0031-366 [I,C]; A61K0031-401 [I,A]; A61K0031-401 [I,C]

BASIC ABSTRACT:

US 20060063827 A1 UPAB: 20060413

NOVELTY - Method of preventing or alleviating symptoms or syndromes associated with the nervous, vascular, muscoloskeletal or cutaneous systems comprises sytemically administering a composition (A) comprising an amino acid (I) e.g. alanine, glycine, isoleucine, proline, serine, valine, beta-alanine, gamma-aminobutanoic acid, citrulline and/or ornithine, present as e.g. free acid, salt, amide and/or lactone, to a mammal (human or animal).

DETAILED DESCRIPTION - Method of preventing or alleviating symptoms or syndromes associated with the nervous, vascular, muscoloskeletal or cutaneous systems comprises sytemically administering a composition (A) comprising an amino acid (I) (alanine, glycine, isoleucine, proline, serine, valine, beta-alanine, gamma-aminobutanoic acid, citrulline and/or ornithine) present as a free acid, salt, partial salt, amide, lactone, ester, anhydride, dimer, oligomer or polymer form, D, L or DL stereoisomers and/or non-stereoisomers, to a mammal (human or animal). An INDEPENDENT CLAIM is also included for a method of preventing or alleviating symptoms or syndromes associated with the nervous, vascular, muscoloskeletal, or cutaneous systems comprising sytemically administering a composition (A1) comprising N-acetylamino acid (N-acetyl-proline or N-acetyl amino acid of formula (R1CH(NHCOCH3)(CH2)n)COOR2) present as free acid, salt, partial salt, amide, ester, anhydride, lactone form, D, L or DL stereoisomers and/or non-stereoisomers, to a mammal.

R1, R2 = H, alkyl, aralkyl or 1-14C aryl (where R1 is optionally be substituted with OH, SH, SCH3, NH2, CONH2, NHCONH2, NHC(=NH)NH2, imidazole, pyrrolidine or other heterocyclic group); and n = 0-5.

Provided that: H attached to any carbon atom is substituted by I, F, Cl, Br, OH or 1-9C alkoxy group. ACTIVITY - Neuroprotective; Nootropic; Analgesic; Antiinflammatory; Antimigraine; **Antibacterial**; **Antimicrobial**; Antiparkinsonian; Muscular-Gen.; Anticonvulsant; CNS-Gen.; Virucide; Dermatological; Antiaddictive; Hemostatic; Antipruritic; Immunosuppressive; Fungicide; Antipsoriatic; Vasotropic; Osteopathic; Antiarthritic; Antirheumatic; Litholytic.

MECHANISM OF ACTION - None given.

USE - (A) or (A1) is useful to prevent or alleviate symptoms or syndromes associated with the nervous, vascular, muscoloskeletal or cutaneous systems. (A) or (A1) is useful to alleviates symptoms associated with Alzheimer's disease (all claimed). (A) or (A1) is useful to prevent or alleviate e.g. progressive loss of memory, shrinkage and atrophy of cerebral cortex, senile plaques of amyloid; Carpal tunnel syndrome: weakness or pain; encephalitis: inflammation of the brain; headache: migraine; meningitis: infection of spinal fluid and meninges; neuralgia: nerve pain, peripheral neuropathy or sciatica; Parkinson's disease: muscular rigidity, amnesia: ataxia, Bell's palsy, epilepsy, multiple sclerosis, myasthenia gravis, narcolepsy, paralysis or rabies; acanthosis nigricans, acrocyanosis, actinic cheilitis, actinic prurigo, dermatitis, dermatosis, dermographism, dyshidrosis, drug eruptions, eczema, erythema, erythema migrans, erythrocyanosis, erythromelalgia, familial hemorrhage, histamine reaction, inflammatory papular and pustular lesions, lichen planus, lupus erythematosus, mycosis fungoides, neurodermatitis, neuropeptide and neurovascular reactions, parapsoriasis, photore action, photosensitivity, pityriasis rosea, pityriasis rubra pilaris, psoriasis, rhinophyma, rosacea, sclerosis, spider naevi, T-cell disorders, telangiectasia, urticaria, osteoporosis: reduction of calcium in bone leading to thin and susceptible to fracture, osteoarthritis: inflammation of joint cartilage provoking swelling and pain, rheumatoid arthritis: damage to heart, lungs, nerves or eyes; ankylosing spondylitis: arthritis affecting sacroiliac joints and spine with inflammation and immovability; bursitis, gout: recurrent acute arthritis from uric acid deposit; backache, bunion and hernia. The ability of (A) or (A1) to prevent Alzheimer's disease (as shown by short term memory loss) was tested in a female. The results showed that N-acetyl-L-

glutamic acid improved her condition substantially and she was able to recognize her family members.

ADVANTAGE - (A) and (A1) does not show adverse side effect. The vitamins, cosmetic and pharmaceutical agents, when used in combination with the amino acids and N-acetylamino acids, shows synergistic effects. MANUAL CODE: CPI: B04-C03D; B06-D01; B07-D03; B07-D09; B10-A13D;
B10-A17; B10-B01B; B10-B02B; B10-C03; B10-C04D;
B10-C04E5; B10-C04E6; B14-A01; B14-A02; B14-A04; B14-C01;
B14-C02; B14-C09; B14-D02B; B14-F01; B14-F02C; B14-F08;
B14-G02A; B14-G02D; B14-J01; B14-J02; B14-J05; B14-J07;
B14-L09; B14-N01; B14-N03; B14-N16; B14-N17; B14-S01;
B14-S14

TECH ORGANIC CHEMISTRY - Preferred Composition: The amount of amino acid in (A) is 0.1-5 g. The amino acid is present in the solution or suspension in a concentration of 1-10%. The N-acetyl proline or N-acetyl amino acid is present in the solution or suspension in a concentration of 1-10%. The amino acid is proline (L-proline (preferred), glycine, L-arginine, sodium L-prolinate, L-prolinamide, ethyl L-prolinate, methyl L-prolinate, propyl L-prolinate, L-Pro-L-Pro dimer, (L-Pro-)8 oligomer, (L-Pro-)20 polymer, D-proline, sodium D-prolinate, D-prolinamide, ethyl D-prolinate, methyl D-prolinate, propyl D-prolinate, DL-proline, sodium DL-prolinate, DL-prolinamide, ethyl DL-prolinate, methyl DL-prolinate and/or propyl DL-prolinate). (A) and (A1) further comprises an additional agent (vitamins, cosmetics and/or pharmaceutical agents). The amount of N-acetyl proline or N-acetyl amino acid in (A1) is 20-500 mg. The N-acetyl amino acid is N-acetylalanine, N-acetyl-beta-alanine, N-acetyl-gamma-aminobutanoic acid, N-acetyl-beta-aminoisobutanoic acid, N-acetyl-arginine, N-acetyl-asparagine, N-acetyl-aspartic acid, N-acetyl-citrulline, N-acetyl-dopa (N-acetyl-3,4-dihydroxyphenylalanine), N-acetyl-glycine, N-acetyl-glutamic acid (preferred), N-acetylglutamine, N-acetyl-histidine, N-acetyl-L-prolinamide, N-acetyl-homoserine, N-acetyl-4-hydroxyproline, N-acetyl-isoleucine, N-acetyl-leucine, N-acetyl prolineethyl ester, N-acetyl-L-glutamic acid, N-acetyl-lysine, N-acetyl-methionine, N-acetyl-ornithine, N-acetyl-phenylalanine, N-acetyl-proline, N-acetyl-L-proline, N-acetylserine, N-acetyl-threonine, N-acetyl-tryptophan, N-acetyl-DL-tryptophan, N-acetyltyrosine and/or N-acetyl-valine.

ACTV ACTIVITY - Neuroprotective; Nootropic; Analgesic; Antiinflammatory; Antimigraine; **Antibacterial; Antimicrobial;** Antiparkinsonian; Muscular-Gen.; Anticonvulsant; CNS-Gen.; Virucide; Dermatological; Antiaddictive; Hemostatic; Antipruritic; Immunosuppressive; Fungicide; Antipsoriatic; Vasotropic; Osteopathic; Antiarthritic; Antirheumatic; Litholytic.

IT UPIT 20060413
2140-CL 2140-USE; 1281662-CL 1281662-USE; 456650-CL 456650-USE; 1281657-CL 1281657-USE; 1280210-CL 1280210-USE; 1280211-CL 1280211-USE; 132391-CL 132391-USE; 1281655-CL 1281655-USE; 264468-CL 264468-USE; 1281654-CL 1281654-USE; 1281653-CL 1281653-USE; 1280215-CL 1280215-USE; 1281659-CL 1281659-USE; 2634-CL 2634-USE; 104757-CL 104757-USE; 78555-CL 78555-USE; 1281658-CL 1281658-USE; 1280218-CL 1280218-USE; 2006-CL 2006-USE; 8685-CL 8685-USE; 466527-CL 466527-USE; 40232-CL 40232-USE; 942573-CL 942573-USE; 593386-CL 593386-USE; 1281656-CL 1281656-USE; 688556-CL 688556-USE; 86356-CL 86356-USE; 238739-CL 238739-USE; 1280220-CL 1280220-USE; 86373-CL 86373-USE; 6983-CL 6983-USE; 137057-CL 137057-USE; 191493-CL 191493-USE; 86383-CL 86383-USE; 1280222-CL 1280222-USE; 102914-CL 102914-USE; 1280223-CL 1280223-USE; 86387-CL 86387-USE; 137147-CL 137147-USE; **86391-CL 86391-USE**; 88920-CL 88920-USE; 6982-CL 6982-USE; 860607-CL 860607-USE; 1280224-CL 1280224-USE; 1281660-CL 1281660-USE; 133364-CL 133364-USE; 6981-CL 6981-USE; 1281661-CL

1281661-USE; 155239-CL 155239-USE; 1143515-CL 1143515-USE; 1280227-CL 1280227-USE; 0323-78601-CL 0323-78601-USE; 8189-CL 8189-USE; 129497-CL 129497-USE; 8182-CL 8182-USE; 8181-CL 8181-USE; 883-CL 883-USE; 5932-CL 5932-USE; 91131-CL 91131-USE; 464159-CL 464159-USE; 184613-CL 184613-USE

M2 *40* H5 H598 H9 J0 J012 J1 J171 J3 J371 M210 M211 M262 M271 M281 M313 M321 M332 M343 M349 M381 M391 M416 M431 M620 M781 M782 P210 P220 P241 P411 P421 P423 P431 P432 P433 P442 P444 P446 P450 P451 P452 P510 P517 P522 P527 P614 P625 P714 P722 P815 P922 P943 M905 M904

DCN: **R09026-K R09026-M R09026-U**

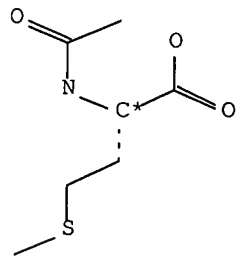
DCR: **86391-K 86391-M 86391-U**

AN.S DCR-86391

CN.P ACETYLMETHIONINE

CN.S 2-Acetylamino-4-methylsulfanyl-butyric acid

SDCN R09026



L89 ANSWER 37 OF 39 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-257320 [24] WPIX

DOC. NO. CPI: C2004-100556 [24]

TITLE: Composition useful as animal feed comprises alkylthioalkanoic acid, organic acids and acidulant

DERWENT CLASS: C03; D13; D15; D22; E19; P14

INVENTOR: BUTTIN P; GIESEN A F; HILLEBRAND P; SCHASTEEN C S; SCOTT F R; VASQUEZ-ANON M; VAZQUEZ-ANON M; WU J

PATENT ASSIGNEE: (NOVU-N) NOVUS INT INC; (NOVU-N) NOVUS INT LLP

COUNTRY COUNT: 104

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004019683	A2	20040311	(200424)*	EN	146[15]	A01N037-36
US 20040175434	A1	20040909	(200459)	EN		A61K033-22
AU 2003268342	A1	20040319	(200462)	EN		
EP 1531672	A2	20050525	(200535)	EN		
BR 2003013917	A	20050705	(200545)	PT		
US 20050215623	A1	20050929	(200564)	EN		A01K061-00
MX 2005002307	A1	20051001	(200620)	ES		A01N037-02
AU 2003268342	A8	20051027	(200624)	EN		A01N037-36

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2004019683 A2	WO 2003-US27323 20030829
US 20040175434 A1 Provisional	US 2002-407050P 20020830
US 20040175434 A1 Provisional	US 2003-441384P 20030121
US 20040175434 A1 Provisional	US 2003-441584P 20030121
US 20040175434 A1 Provisional	US 2003-456673P 20030321
US 20040175434 A1 Provisional	US 2003-456732P 20030321
US 20050215623 A1 Provisional	US 2003-456673P 20030321
US 20050215623 A1 Provisional	US 2003-456732P 20030321
US 20040175434 A1 Provisional	US 2003-465549P 20030425
US 20050215623 A1 Provisional	US 2003-465549P 20030425
AU 2003268342 A1	AU 2003-268342 20030829
BR 2003013917 A	BR 2003-13917 20030829
EP 1531672 A2	EP 2003-749300 20030829
US 20040175434 A1	US 2003-652745 20030829
US 20050215623 A1 CIP of	US 2003-652745 20030829
EP 1531672 A2	WO 2003-US27323 20030829
BR 2003013917 A	WO 2003-US27323 20030829
MX 2005002307 A1	WO 2003-US27323 20030829
MX 2005002307 A1	MX 2005-2307 20050228
US 20050215623 A1	US 2005-78093 20050311
AU 2003268342 A8	AU 2003-268342 20030829

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003268342	A1	Based on	WO 2004019683	A
EP 1531672	A2	Based on	WO 2004019683	A
BR 2003013917	A	Based on	WO 2004019683	A
MX 2005002307	A1	Based on	WO 2004019683	A
AU 2003268342	A8	Based on	WO 2004019683	A

PRIORITY APPLN. INFO: US 2003-465549P 20030425
US 2002-407050P 20020830
US 2003-441584P 20030121
US 2003-441384P 20030121
US 2003-456732P 20030321
US 2003-456673P 20030321
US 2003-652745 20030829
US 2005-78093 20050311

INT. PATENT CLASSIF.:

MAIN: A01N037-36

SECONDARY: A01N037-02; A01N037-04; A01N037-10; A01N059-00; A01N059-02; A01N059-26

IPC RECLASSIF.: A01K0061-00 [I,A]; A01K0061-00 [I,C]; A01N0037-36 [I,A]; A01N0037-36 [I,C]; A01N0037-40 [I,A]; A01N0037-42 [I,A]; A01N0037-42 [I,C]; A01N0037-44 [I,A]; A01N0037-44 [I,C]; A01N0037-46 [I,A]; A23B0004-14 [I,C]; A23B0004-20 [I,A]; A23K0001-16 [I,A]; A23K0001-16 [I,C]; A23K0001-18 [I,A]; A23K0001-18 [I,C]; A23K0003-00 [I,A]; A23K0003-00 [I,C]; A23L0003-3463 [I,C]; A23L0003-3508 [I,A]; A23L0003-3535 [I,A]; A61K0031-35 [I,A]; A61K0031-35 [I,C]

BASIC ABSTRACT:

WO 2004019683 A2 UPAB: 20060121

NOVELTY - Composition comprises alkylthioalkanoic acid, at least one organic acids and an acidulant.

DETAILED DESCRIPTION - A composition comprises alkylthioalkanoic acid of formula R1-S-(CH2)n-CH(R2)-COOH (I), its salt, esters or amides, at least one organic acids (a) and an acidulant (b). R1 = 1-4C alkyl;

n = 0 - 2;

R2 = -OH, -NH2, -OCOR3 or -NHCOR3; and R3 = organic acid derivative. An INDEPENDENT CLAIM is also included for enhancing the palatability of animal food involves treating the food with (I) (0.01 - 0.5, preferably 0.05 - 0.3 weight%). ACTIVITY - **Antibacterial**; Fungicide.

MECHANISM OF ACTION - Microbial growth inhibitor. A composition comprising Alimet (RTM; 2-hydroxy-4-(methylthio)butanoic acid) and formic acid was tested for **antibacterial** activity by incubating S. enteritidis culture with the composition for 4 hours at 37 degreesC. Colony counts by standard procedures were found to be reduced from 5.15 to 1.15 log cfu/ml.

USE - As an animal feed e.g. dairy cows, lactating dairy cows, dairy calves, beef cattle, sheep, goats, fish, crustaceans, swine, horses, chickens, turkeys, hatchlings, dog or cat, for inhibiting and killing microbes e.g. bacterium or mold in water or dry and/or liquid food (e.g. human food, livestock food, pet food, aquaculture food, meat or bone meal) containing corn and soya having a moisture content of 0 - 17 (preferably 0.01, especially 10) weight% and for enhancing the palatability of animal food e.g. canine, feline or aquaculture (all claimed).

MANUAL CODE: CPI: C05-B02A3; C05-C02; C05-C05; C05-C07; C10-B02D; C10-C02; C10-C04D; C14-A01; C14-A04; D03-G01; D09-A; E10-B02D1; E10-C02D2; E10-C04D4; E31-B03C; E31-B03D; E31-F05; E31-H05; E31-K07

TECH

ORGANIC CHEMISTRY - Preferred Components: (a) Is derived from organic acid having at least one carboxyl and has pKa of less than 5.5. (a) Is formic acid, acetic acid, propionic acid, butyric acid, benzoic acid, lactic acid, malic acid, tartaric acid, mandelic acid, citric acid, fumaric acid, sorbic acid, boric acid, succinic acid, adipic acid, glycolic acid and/or glutaric acid (preferably formic acid, propionic acid, butyric acid, lactic acid, citric acid or fumaric acid). (b) Is mineral acid (preferably phosphoric acid, sulfuric acid, phosphorus acid, hydrochloric acid, hydrobromic acid or nitric acid, especially phosphoric acid). The combined concentration of (I) and organic acid is 0.1 - 50 (preferably 0.8 - 30, especially 1 - 25, particularly 1 - 10) g/kg. For enhancing the palatability of canine and feline food, 0.10 and 0.25 wt.% of (I) is used respectively. Preferred Composition: The composition comprises (wt.%): either 2-hydroxy-4-(methylthio)butanoic acid (Ia) (5 - 20, preferably 10), formic acid (65 - 85, preferably 75), propionic acid (1 - 15, preferably 5), and phosphoric acid (5 - 20, preferably 10); (Ia) (20 - 40, preferably 30), formic acid (45 - 65, preferably 55), propionic acid (1 - 20, preferably 10), and phosphoric acid (1 - 15, preferably 5); (Ia) (20 - 40, preferably 30), butyric acid (10 - 30, preferably 20) or (5 - 25, preferably 15), lactic acid (10 - 30, preferably 20) or (10 - 30, preferably 20), and phosphoric acid (20 - 40, preferably 30) or (25 - 45, preferably 35); (Ia) (10 - 30, preferably 20), butyric acid (2 - 22, preferably 12), formic acid (20 - 40, preferably 30), lactic acid (8 - 28, preferably 18), and phosphoric acid (10 - 30, preferably 20); (Ia) (10 - 30, preferably 20), butyric acid (2 - 22, preferably 12), lactic acid (8 - 28, preferably 18), propionic acid (20 - 40, preferably 30), and phosphoric acid (10 - 30, preferably 20); (Ia) (1 - 20, preferably 10), butyric acid (1 - 15, preferably 5), formic acid (65 - 85, preferably 75), propionic acid (1 - 15, preferably 5), and phosphoric acid (1 - 15, preferably 5); or (Ia) (20 - 40, preferably 30), formic acid (40 - 60, preferably 50), and propionic acid (10 - 30, preferably 20). The content of (Ia) is 5 - 50 (preferably 5, 25 or 45) wt.% of the sum of (Ia) and acidulant. Preferred Method: The combination mixed with the food, which is heat-treated, is applied to a pre-mixed or pre-pelleted feed and is uniformly dispersed throughout the food.

ACTV ACTIVITY - **Antibacterial**; Fungicide.

ACTN MECHANISM OF ACTION - Microbial growth inhibitor. A composition comprising Alimet (RTM; 2-hydroxy-4-(methylthio)butanoic acid) and formic acid was tested for **antibacterial** activity by incubating S. enteritidis

culture with the composition for 4 hours at 37 degreesC. Colony counts by standard procedures were found to be reduced from 5.15 to 1.15 log cfu/ml.

IT UPIT 20060121
92747-CL; 8186-CL; 0126-87001-CL; 11-CL; 1-CL; 407-CL; 8440-CL; 168-CL; 7447-CL; 4073-CL; 2623-CL; 1932-CL; 849-CL; 7658-CL; 93-CL; 265-CL; 8770-CL; 7560-CL; 7628-CL; 63-CL; 7-CL; 801-CL; 9-CL; 62-CL; 80-CL
M2 *01* H4 H401 H481 H5 H598 H8 H9 J0 J011 J1 J171 M210 M211 M271 M281 M313 M321 M332 M343 M349 M381 M391 M416 M431 M620 M782 P001 P220 P241 Q214 Q220 M905 M904
DCN: **R14043-K R14043-M R14043-T R14047-K R14047-M R14047-T**
DCR: **92747-K 92747-M 92747-T**
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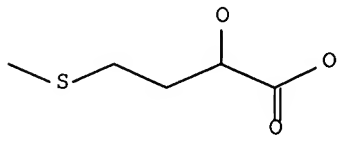
AN.S DCR-92747
CN.P DESMENINOL
CN.S 2-Hydroxy-4-methylsulfanyl-butyric acid
SDCN R14043; R14047



L89 ANSWER 38 OF 39 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 1999-571267 [48] WPIX
DOC. NO. CPI: C1999-166660 [48]
DOC. NO. NON-CPI: N1999-420944 [48]
TITLE: High-throughput in vitro assay for determining peptidyl transferase activity and for identifying peptidyl transferase modulators useful as **antibacterial** and antifungal agents
DERWENT CLASS: B04; D16; S03
INVENTOR: LYNCH A S; MATTHEW B J; PETERSON M G
PATENT ASSIGNEE: (TULA-N) TULARIK INC
COUNTRY COUNT: 84

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 5962244	A	19991005	(199948)*	EN	20[14]	C12Q001-48
WO 9957240	A2	19991111	(200001)	EN		C12N000-00
AU 9936713	A	19991123	(200016)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 5962244 A	US 1998-74580 19980507
AU 9936713 A	AU 1999-36713 19990429
WO 9957240 A2	WO 1999-US9356 19990429

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9936713 A	Based on	WO 9957240 A

PRIORITY APPLN. INFO: US 1998-74580 19980507
INT. PATENT CLASSIF.:
IPC RECLASSIF.: C12Q0001-48 [I,A]; C12Q0001-48 [I,C]
BASIC ABSTRACT:

US 5962244 A UPAB: 20060115

NOVELTY - A high-throughput in vitro assay method (X) for determining peptidyl transferase (PT) activity and for identifying modulators of PT useful as **antibacterial** and antifungal agents, is new.

DETAILED DESCRIPTION - A method (X) for determining peptidyl transferase (PT) activity, comprises: (i) incubating a reaction mixture comprising PT, a peptidyl-tRNA analog (comprising a peptidyl moiety attached to an immobilized tag) and an aminoacyl-tRNA analog under conditions suitable for transfer of the peptidyl moiety to the aminoacyl-tRNA analog; (ii) binding the immobilizable tag of the peptidyl moiety of the peptidyl-tRNA analog to a solid support; and (iii) detecting the presence of the aminoacyl-tRNA analog on the solid support as an indication of PT activity.

USE - Catalysis of peptide bond formation requires the precise juxtaposition, by the ribosome, of the acceptor ends of the amino acid-charged tRNAs bound in the peptidyl site (P site) and the aminoacyl site (A site) of its active site. This activity represents the essential enzymatic activity of the ribosome and is called the peptidyl transferase activity and is an integral component of the large subunit of all ribosomes. Studies of bacterial ribosomes have identified the essential active site constituents of the PT activity as a few ribosomal protein subunits and the 23S rRNA. As the integrity of the latter is essential for enzymatic activity, it is assumed that it plays a direct role in the catalysis of peptide bond formation (acting as a ribozyme). (X) may be used to assay for PT activity in vitro and to identify modulators (agonists and antagonists) which may be used to modulate its activity in vivo and control protein expression in bacteria and fungi by interfering with the elongation phase of protein synthesis by inhibiting the transfer of the amino acid moieties of the aminoacyl-tRNA substrates into the growing peptide chain. These modulators may be useful as **antibacterial** and antifungal agents. Additionally, agents which inhibit protein biosynthesis do so affecting a number of discrete steps within the overall process. These agents provide valuable research tools for understanding the biochemistry and enzymology of protein synthesis in eukaryotic and prokaryotic organisms.

ADVANTAGE - The method (X) is a high throughput, highly sensitive assay that does not require the use of radioactive compounds. Intact ribosomes (or 23S rRNA plus ribosomal subunits in which PT has been isolated) can be employed as well as numerous peptidyl-tRNA analogs, aminoacyl-tRNA analogs.

MANUAL CODE: CPI: B04-B03C; B04-B04M; B04-C01; B04-E03F; B04-E07; B04-G01; B04-L04; B04-M01; B04-N03; B04-N04; B05-A04; B06-D09; B10-B02D; B10-B02E; B10-C04E; B11-A02; B11-B; B11-C07A; B11-C08E1; B11-C08E3; B11-C09; B12-K04E; B14-A01; B14-A04; B14-D03; B14-D06; B14-L01; B14-L06; D05-A02B; D05-A04; D05-H09; D05-H10; D05-H11; D05-H12D4; D05-H12D6; D05-H13; D05-H18
EPI: S03-E14H4

TECH

BIOTECHNOLOGY - Preferred Method: In (X), the PT comprises a 23S or 28S rRNA associated with a subset of proteins to reconstitute a complex with functional PT activity. The 23S rRNA preferably comprises an intact prokaryotic ribosome. The 28S rRNA preferably comprises an intact eukaryotic ribosome.

(X) further comprises a potential modulator of PT activity and transferring the reaction mixture to a solid support to which the immobilizable tag binds directly or indirectly. The immobilizable tag is contacted with a capture moiety that binds to the solid support. The aminoacyl-tRNA may be detected directly or indirectly by contacting it with a detection moiety comprising either a detectable label or an antibody specific for the aminoacyl-tRNA analog. The peptidyl-tRNA analog is an amino acid conjugated to an oligonucleotide comprising a 3' sequence from a tRNA. The oligonucleotide is 3 to 5 or more nucleotides in length and preferably comprises:

5'-CCA-3' (I);

5'-CACCA-3' (II); or

5'-CAACCA-3' (III).

The amino acid may be a naturally occurring amino acid (such as phenylalanine, methionine and formylmethionine) or an analog (such as puromycin and puromycin derivatives) which functions as the amino acid component of the peptidyl-tRNA analog.

TI High-throughput in vitro assay for determining peptidyl transferase activity and for identifying peptidyl transferase modulators useful as **antibacterial** and antifungal agents

TT TT: HIGH THROUGHPUT VITRO ASSAY DETERMINE PEPTIDYL TRANSFERASE ACTIVE IDENTIFY MODULATE USEFUL **ANTIBACTERIAL** ANTIFUNGAL AGENT

NOV NOVELTY - A high-throughput in vitro assay method (X) for determining peptidyl transferase (PT) activity and for identifying modulators of PT useful as **antibacterial** and antifungal agents, is new.

USE

USE - Catalysis of peptide bond formation requires the precise juxtaposition, by the ribosome, of the acceptor ends of the amino acid-charged tRNAs bound in the peptidyl site (P site) and the aminoacyl site (A site) of its active site. This activity represents the essential enzymatic activity of the ribosome and is called the peptidyl transferase activity and is an integral component of the large subunit of all ribosomes. Studies of bacterial ribosomes have identified the essential active site constituents of the PT activity as a few ribosomal protein subunits and the 23S rRNA. As the integrity of the latter is essential for enzymatic activity, it is assumed that it plays a direct role in the catalysis of peptide bond formation (acting as a ribozyme).

(X) may be used to assay for PT activity in vitro and to identify modulators (agonists and antagonists) which may be used to modulate its activity in vivo and control protein expression in bacteria and fungi by interfering with the elongation phase of protein synthesis by inhibiting the transfer of the amino acid moieties of the aminoacyl-tRNA substrates into the growing peptide chain. These modulators may be useful as **antibacterial** and antifungal agents.

Additionally, agents which inhibit protein biosynthesis do so affecting a number of discrete steps within the overall process. These agents provide valuable research tools for understanding the biochemistry and enzymology of protein synthesis in eukaryotic and prokaryotic organisms.

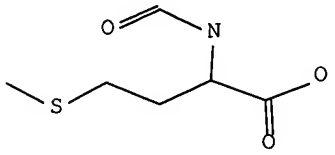
IT UPIT 20060115

105730-CL; 184611-CL; 184610-CL; 184587-CL; 134498-CL; 105034-CL; 8184-CL; 132390-CL; **235201-CL**; 235200-CL 235200-DET

M2 *10* H5 H598 H9 J0 J012 J1 J171 J3 J371 M210 M211 M271 M281 M313 M321 M332 M343 M349 M381 M391 M416 M430 M620 M782 N102 P831 Q233. M905 M904

DCN: **RA0QG8-D RA0QG8-K RA0QG8-M**

RA0QG8-Q
DCR: **235201-D 235201-K 235201-M**
235201-Q
AN.S DCR-235201
CN.P N-FORMYLMETHIONINE
CN.S 2-Formylamino-4-methylsulfanyl-butyric acid
SDCN RA0QG8



L89 ANSWER 39 OF 39 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-074563 [07] WPIX
DOC. NO. CPI: C2000-021536 [07]
TITLE: Controlling plant-parasitc nematodes
DERWENT CLASS: C03; C04
INVENTOR: KAWADA H; WAKUI A; YOSHIDA R
PATENT ASSIGNEE: (HODO-N) HODOGAYA AGROS CO LTD; (HODO-C) HODOGAYA CHEM CO LTD; (HODO-C) HODOGAYA CHEM IND CO LTD; (HODO-N) HODOYA AGROS KK
COUNTRY COUNT: 26

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
EP 965269	A2	19991222	(200007)*	EN	8[0]	A01N037-44
JP 2000007506	A	20000111	(200013)	JA	4	A01N041-12
JP 2000086410	A	20000328	(200026)	JA	4	A01N037-36

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 965269	A2	EP 1999-111591	19990615
JP 2000007506	A	JP 1998-168398	19980616
JP 2000086410	A	JP 1998-253001	19980907

PRIORITY APPLN. INFO: JP 1998-253001 19980907
JP 1998-168398 19980616
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A01N0025-32 [I,A]; A01N0025-32 [I,C]; A01N0037-36 [I,A]; A01N0037-36 [I,A]; A01N0037-36 [I,C]; A01N0037-36 [I,C]; A01N0037-44 [I,A]; A01N0037-44 [I,A]; A01N0037-44 [I,C]; A01N0037-44 [I,C]; A01N0041-00 [I,C]; A01N0041-12 [I,A]; C05G0003-02 [I,A]; C05G0003-02 [I,C]

BASIC ABSTRACT:
EP 965269 A2 UPAB: 20050409
NOVELTY - A method for improving a nematode fauna comprises applying methionine (I) or 2-hydroxy-4-(methyl-thio)butyric acid (II) or its salt and at least one substance (III) selected from an inorganic or organic fertilizer, a pH-controlling agent and/or an oxygen-supplying agent, to the soil.

DETAILED DESCRIPTION - The methionine is a compound of formula (I) and the 2-hydroxy-4-(methyl-thio)butyric acid is of formula (II). An INDEPENDENT CLAIM is also included fora composition comprising (I) and (III).
ACTIVITY - Pesticide, **antimicrobial**.
MECHANISM OF ACTION - None given.
USE - (I) controls the plant-parasitic nematodes damaging the plant and (II) reduces harmful soil microbes or nematodes.
ADVANTAGE - The dose of (I) can be low and still efficient compared to prior art. The composition has then a low phytotoxicity and can be used during the growing period of the crop plants. MANUAL CODE: CPI: C04-B01B; C04-B04B; C04-C02; C04-N04; C05-A01A;
C05-A01B; C05-B02A; C05-C01; C05-C02; C05-C04; C05-C08; C10-B02D; C10-C04; C10-C04D; C14-B03A; C14-T04

Member(0002)
ABEQ JP 2000007506 A UPAB 20050409
NOVELTY - A method for improving a nematode fauna comprises applying methionine (I) or 2-hydroxy-4-(methyl-thio)butyric acid (II) or its salt and at least one substance (III) selected from an inorganic or organic fertilizer, a pH-controlling agent and/or an oxygen-supplying agent, to the soil.
DETAILED DESCRIPTION - The methionine is a compound of formula (I) and the 2-hydroxy-4-(methyl-thio)butyric acid is of formula (II).
An INDEPENDENT CLAIM is also included fora composition comprising (I) and (III).
ACTIVITY - Pesticide, **antimicrobial**.
MECHANISM OF ACTION - None given.
USE - (I) controls the plant-parasitic nematodes damaging the plant and (II) reduces harmful soil microbes or nematodes.
ADVANTAGE - The dose of (I) can be low and still efficient compared to prior art. The composition has then a low phytotoxicity and can be used during the growing period of the crop plants.

Member(0003)
ABEQ JP 2000086410 A UPAB 20050409
NOVELTY - A method for improving a nematode fauna comprises applying methionine (I) or 2-hydroxy-4-(methyl-thio)butyric acid (II) or its salt and at least one substance (III) selected from an inorganic or organic fertilizer, a pH-controlling agent and/or an oxygen-supplying agent, to the soil.
DETAILED DESCRIPTION - The methionine is a compound of formula (I) and the 2-hydroxy-4-(methyl-thio)butyric acid is of formula (II).
An INDEPENDENT CLAIM is also included fora composition comprising (I) and (III).
ACTIVITY - Pesticide, **antimicrobial**.
MECHANISM OF ACTION - None given.
USE - (I) controls the plant-parasitic nematodes damaging the plant and (II) reduces harmful soil microbes or nematodes.
ADVANTAGE - The dose of (I) can be low and still efficient compared to prior art. The composition has then a low phytotoxicity and can be used during the growing period of the crop plants.
TECH
AGRICULTURE - Preferred Composition: (III) is ammonium sulfate, ammonium chloride, calcium phosphate, calcium chloride, potassium phosphate, sodium phosphate, quick lime, potassium carbonate, sodium hydrogencarbonate, sulfur, ammonium nitrate, calcium peroxide, organic fertilizers, saccharides, proteins, lipids, organic acids (optionally as industrial wastes), live-stock wastes (optionally in the form of compost). The composition contains 10-90 wt. % of (I) and the rest is (III) (all claimed).

ACTV ACTIVITY - Pesticide, **antimicrobial**.
IT UPIT 20050409
92747-CL; 184614-CL; 184616-CL; 87324-CL; 66-CL; 109324-CL; 89828-CL; 104540-CL; 107355-CL; 68-CL; 363-CL; 657-CL; 130024-CL; 107317-CL; 607-CL; 200757-CL; 8186-CL
M2 *02* H4 H401 H481 H5 H598 H8 H9 J0 J011 J1 J171 M210 M211 M271 M281 M313 M321 M332 M343 M349 M381 M391 M416 M431 M620 M782 P345 M905 M904
DCN: **R14043-K R14043-M R14047-K R14047-M**
DCR: **92747-K 92747-M**

Member(0002)
ABEQ JP 2000007506 A UPAB 20050409
NOVELTY - A method for improving a nematode fauna comprises applying methionine (I) or 2-hydroxy-4-(methyl-thio)butyric acid (II) or its salt and at least one substance (III) selected from an inorganic or organic fertilizer, a pH-controlling agent and/or an oxygen-supplying agent, to the soil.
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ACTIVITY - Pesticide, **antimicrobial**.
MECHANISM OF ACTION - None given.
USE - (I) controls the plant-parasitic nematodes damaging the plant and (II) reduces harmful soil microbes or nematodes.
ADVANTAGE - The dose of (I) can be low and still efficient compared to prior art. The composition has then a low phytotoxicity and can be used during the growing period of the crop plants.

Member(0003)
ABEQ JP 2000086410 A UPAB 20050409
NOVELTY - A method for improving a nematode fauna comprises applying methionine (I) or 2-hydroxy-4-(methyl-thio)butyric acid (II) or its salt and at least one substance (III) selected from an inorganic or organic fertilizer, a pH-controlling agent and/or an oxygen-supplying agent, to the soil.
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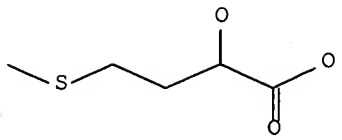
ACTIVITY - Pesticide, **antimicrobial**.
MECHANISM OF ACTION - None given.
USE - (I) controls the plant-parasitic nematodes damaging the plant and (II) reduces harmful soil microbes or nematodes.
ADVANTAGE - The dose of (I) can be low and still efficient compared to prior art. The composition has then a low phytotoxicity and can be used during the growing period of the crop plants.
AN.S DCR-92747
CN.P DESMENINOL
CN.S 2-Hydroxy-4-methylsulfanyl-butyric acid
SDCN R14043; R14047



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OTHER CA INDEX NAMES:
CN Methionine, N-formyl-, L- (6CI, 7CI, 8CI)
OTHER NAMES:
CN Formyl-L-methionine
CN Formylmethionine
CN L-Formylmethionine
CN L-N-Formylmethionine
CN N-Formyl-L-methionine
CN N-Formylmethionine
CN NSC 334322
FS STEREOSEARCH
MF C6 H11 N O3 S
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, EMBASE, MEDLINE, TOXCENTER, USPAT2, USPATFULL
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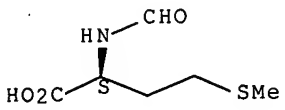

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L90 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
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CN Butyric acid, 2-hydroxy-4-(methylthio)- (6CI, 8CI)
OTHER NAMES:
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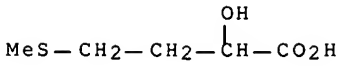

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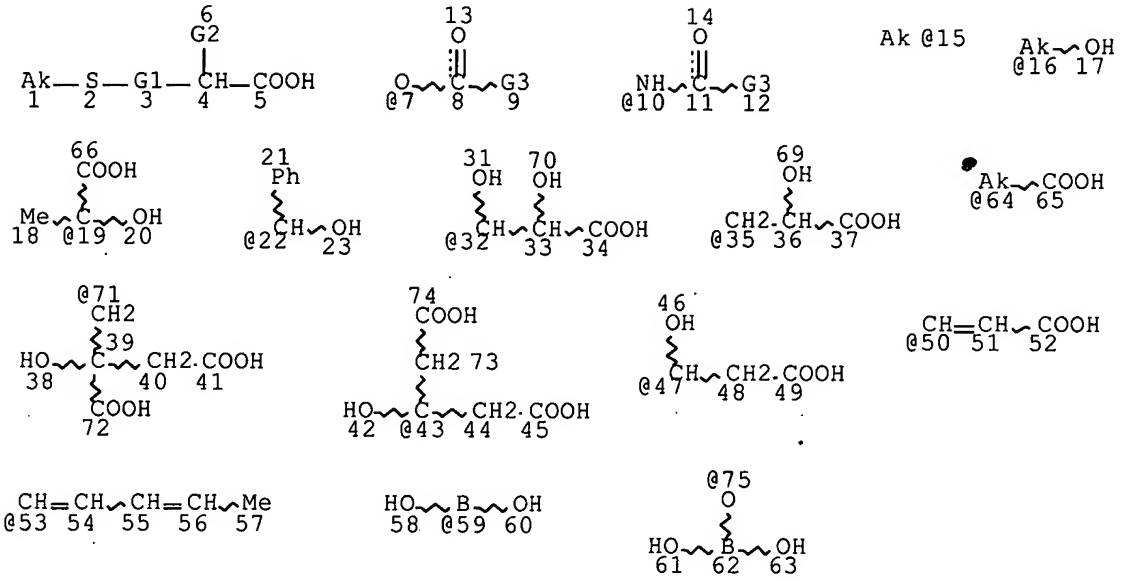

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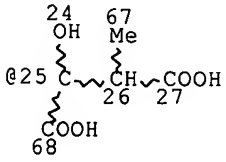

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                  110-17-8/BI OR 110-44-1/BI OR 110-94-1/BI OR 124-04-9/BI OR
                  50-21-5/BI OR 583-91-5/BI OR 64-18-6/BI OR 64-19-7/BI OR
                  65-85-0/BI OR 666823-60-5/BI OR 666823-61-6/BI OR 666823-62-7/B
                  I OR 666823-63-8/BI OR 666823-64-9/BI OR 666823-65-0/BI OR
                  666823-66-1/BI OR 666823-67-2/BI OR 666823-68-3/BI OR 666823-69
                  -4/BI OR 666823-70-7/BI OR 666823-71-8/BI OR 666823-72-9/BI OR
                  6915-15-7/BI OR 77-92-9/BI OR 79-09-4/BI OR 79-14-1/BI OR
                  87-69-4/BI OR 90-64-2/BI)
L3            11 SEA ABB=ON  L2 AND S/ELS
               ---------

     FILE 'CAPLUS' ENTERED AT 09:25:30 ON 28 FEB 2007
                ACT SHO745CAAU/A
               ---------
L4  (          1)SEA ABB=ON  US2003-652745/APPS
L5  (         44)SEA ABB=ON  SCHASTEEN C?/AU
L6  (      21547)SEA ABB=ON  WU J?/AU
L7  (          6)SEA ABB=ON  BUTTIN P?/AU
L8  (          4)SEA ABB=ON  HILLEBRAND P?/AU
L9  (        594)SEA ABB=ON  SCOTT F?/AU
L10 (        351)SEA ABB=ON  VASQUEZ ANON M?/AU OR VASQUEZ M?/AU OR ANON M?/AU
L11 (          1)SEA ABB=ON  L5 AND L6 AND L7 AND L8 AND L9 AND L10
L12 (         31)SEA ABB=ON  (10043-35-3/BI OR 107-92-6/BI OR 110-15-6/BI OR
                  110-17-8/BI OR 110-44-1/BI OR 110-94-1/BI OR 124-04-9/BI OR
                  50-21-5/BI OR 583-91-5/BI OR 64-18-6/BI OR 64-19-7/BI OR
                  65-85-0/BI OR 666823-60-5/BI OR 666823-61-6/BI OR 666823-62-7/B
                  I OR 666823-63-8/BI OR 666823-64-9/BI OR 666823-65-0/BI OR
                  666823-66-1/BI OR 666823-67-2/BI OR 666823-68-3/BI OR 666823-69
                  -4/BI OR 666823-70-7/BI OR 666823-71-8/BI OR 666823-72-9/BI OR
                  6915-15-7/BI OR 77-92-9/BI OR 79-09-4/BI OR 79-14-1/BI OR
                  87-69-4/BI OR 90-64-2/BI)
L13 (         11)SEA ABB=ON  L12 AND S/ELS
L14 (        488)SEA ABB=ON  L13
L15 (         10)SEA ABB=ON  (L5 OR L6 OR L7 OR L8 OR L9 OR L10) AND L14
L16           11 SEA ABB=ON  (L4 OR L11 OR L15)
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                ACT SHO745CA1/A
                ---------
L17 (        31)SEA ABB=ON  (10043-35-3/BI OR 107-92-6/BI OR 110-15-6/BI OR
                110-17-8/BI OR 110-44-1/BI OR 110-94-1/BI OR 124-04-9/BI OR
                50-21-5/BI OR 583-91-5/BI OR 64-18-6/BI OR 64-19-7/BI OR
                65-85-0/BI OR 666823-60-5/BI OR 666823-61-6/BI OR 666823-62-7/B
                I OR 666823-63-8/BI OR 666823-64-9/BI OR 666823-65-0/BI OR
                666823-66-1/BI OR 666823-67-2/BI OR 666823-68-3/BI OR 666823-69
                -4/BI OR 666823-70-7/BI OR 666823-71-8/BI OR 666823-72-9/BI OR
                6915-15-7/BI OR 77-92-9/BI OR 79-09-4/BI OR 79-14-1/BI OR
                87-69-4/BI OR 90-64-2/BI)
L18 (        11)SEA ABB=ON  L17 AND S/ELS
L19 (       488)SEA ABB=ON  L18
L20 (     73137)SEA ABB=ON  ANTIBACTERI?/OBI
L21 (     81318)SEA ABB=ON  BACTERICID?/OBI
L22 (     57157)SEA ABB=ON  ANTIMICROB?/OBI OR MICROBICID?/OBI
L23           5 SEA ABB=ON  L19 AND (L20 OR L21 OR L22)
                ---------

     FILE 'REGISTRY' ENTERED AT 09:25:44 ON 28 FEB 2007
                D SCAN L3
L24           1 SEA ABB=ON  L3 AND 1/NC

     FILE 'LREGISTRY' ENTERED AT 09:34:40 ON 28 FEB 2007
L25           0 SEA ABB=ON  ACETIC ACID/NC
L26           1 SEA ABB=ON  ACETIC ACID/CN
L27           1 SEA ABB=ON  BENZOIC ACID/CN
L28           1 SEA ABB=ON  MANDELIC ACID/CN
L29           1 SEA ABB=ON  BORIC ACID/CN
L30           1 SEA ABB=ON  SUCCINIC ACID/CN
L31           1 SEA ABB=ON  ADIPIC ACID/CN
L32           1 SEA ABB=ON  GLYCOLIC ACID/CN
L33           1 SEA ABB=ON  GLUTARIC ACID/CN
L34           8 SEA ABB=ON  (L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR
                L33)
                D IDE 1-8

     FILE 'STNGUIDE' ENTERED AT 09:35:46 ON 28 FEB 2007

     FILE 'REGISTRY' ENTERED AT 09:37:38 ON 28 FEB 2007
L35       30017 SEA ABB=ON  64-19-7/CRN
L36        3907 SEA ABB=ON  65-85-0/CRN
L37        2429 SEA ABB=ON  79-14-1/CRN
L38         416 SEA ABB=ON  90-64-2/CRN
L39        6675 SEA ABB=ON  110-15-6/CRN
L40        1194 SEA ABB=ON  110-94-1/CRN
L41       32431 SEA ABB=ON  124-04-9/CRN
L42          62 SEA ABB=ON  11113-50-1/CRN
                SET SMARTSELECT ON
L43             SEL L24 1- RN :       1 TERM
                SET SMARTSELECT OFF
L44          30 SEA ABB=ON  L43/CRN
L45           0 SEA ABB=ON  L44 AND (L35 OR L36 OR L37 OR L38 OR L39 OR L40 OR
                L41 OR L42)

     FILE 'LREGISTRY' ENTERED AT 09:39:04 ON 28 FEB 2007
L46           1 SEA ABB=ON  LACTIC ACID/CN
                D IDE

     FILE 'REGISTRY' ENTERED AT 09:39:24 ON 28 FEB 2007
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L47             0 SEA ABB=ON  50-12-5/CRN
L48             1 SEA ABB=ON  L3 AND NC>2
                  D IDE
L49          2465 SEA ABB=ON  50-21-5/CRN
L50             2 SEA ABB=ON  L49 AND L44
L51            10 SEA ABB=ON  L3 NOT L24

     FILE 'CAPLUS' ENTERED AT 09:41:51 ON 28 FEB 2007
L52             1 SEA ABB=ON  L51
L53             1 SEA ABB=ON  L52 AND L23

     FILE 'STNGUIDE' ENTERED AT 09:42:48 ON 28 FEB 2007

     FILE 'REGISTRY' ENTERED AT 09:53:36 ON 28 FEB 2007
L54               STR
L55             3 SEA SSS SAM L54
                  D SCAN
L56               STR L54
L57             2 SEA SSS SAM L56
L58        364197 SEA SSS FUL L56 EXTEND
L59           337 SEA SSS FUL L56
                  SAVE TEMP L59 SHO745FULL/A

     FILE 'CAPLUS' ENTERED AT 10:11:06 ON 28 FEB 2007
L60          1976 SEA ABB=ON  L59
L61        130950 SEA ABB=ON  ANTIBACTERI?/OBI OR BACTERICID?/OBI
L62         57170 SEA ABB=ON  MICROBICID?/OBI OR ANTIMICROB?/OBI
L63            32 SEA ABB=ON  L60 AND (L61 OR L62)

     FILE 'REGISTRY' ENTERED AT 10:12:22 ON 28 FEB 2007
L64               ANALYZE L59 1- LC :       45 TERMS
                  D 1-45

     FILE 'CAOLD' ENTERED AT 10:13:40 ON 28 FEB 2007
L65           129 SEA ABB=ON  L59

     FILE 'AGRICOLA, BIOSIS, BIOTECHNO, ANABSTR' ENTERED AT 10:14:39 ON 28 FEB
     2007
L66           639 SEA ABB=ON  L59
L67         68168 SEA ABB=ON  MICROBICID? OR ANTIMICROB?
L68        197800 SEA ABB=ON  ANTIBACTERI? OR BACTERICID?
L69             8 SEA ABB=ON  L66 AND (L67 OR L68)

     FILE 'DRUGU' ENTERED AT 10:15:39 ON 28 FEB 2007
L70             1 SEA ABB=ON  L59
                  D TRIAL
L71             0 SEA ABB=ON  L70 AND LITERATURE/FS

     FILE 'STNGUIDE' ENTERED AT 10:16:32 ON 28 FEB 2007

     FILE 'CAPLUS' ENTERED AT 10:17:01 ON 28 FEB 2007
                  D QUE L16
L72            11 SEA ABB=ON  L16 OR (L16 AND L60)
                  D IBIB ED ABS HITSTR 1-11

     FILE 'REGISTRY' ENTERED AT 10:18:14 ON 28 FEB 2007
                  D QUE L45
                  D QUE L51

     FILE 'CAPLUS' ENTERED AT 10:18:46 ON 28 FEB 2007
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                D QUE L23
L73           3 SEA ABB=ON  L23 NOT L72
                D IBIB ED ABS HITSTR 1-3

     FILE 'REGISTRY' ENTERED AT 10:20:12 ON 28 FEB 2007
                D STAT QUE L59

     FILE 'CAPLUS' ENTERED AT 10:20:20 ON 28 FEB 2007
                D QUE NOS L63
                E BACTERIOSTAT
L74        9530 SEA ABB=ON  BACTERIOSTAT?/OBI
L75          32 SEA ABB=ON  L60 AND (L61 OR L62 OR L74)
                D QUE NOS L75
L76          27 SEA ABB=ON  L75 NOT (L23 OR L72)

     FILE 'AGRICOLA, BIOSIS, BIOTECHNO, ANABSTR' ENTERED AT 10:21:39 ON 28 FEB
     2007
                D QUE L69 NOS
L77        3586 SEA ABB=ON  BACTERIOSTAT?
L78           8 SEA ABB=ON  L66 AND (L67 OR L68 OR L77)
                D QUE L78 NOS

     FILE 'WPIX' ENTERED AT 10:22:48 ON 28 FEB 2007
                D QUE NOS L59
L79           1 SEA SSS SAM L56
L80       17791 SEA SSS FUL L56 EXTEND
L81          25 SEA SSS FUL L56
                SAVE TEMP L81 SHO745WPISTR/A
                D TRIAL
L82          94 SEA ABB=ON  L81/DCR
                SEL SDRN,SDCN,DCSE L81
L83          94 SEA ABB=ON  (RAAZNM/DRN,DCN,DCRE OR RABZAG/DRN,DCN,DCRE OR
                RAB4ME/DRN,DCN,DCRE OR RADG5P/DRN,DCN,DCRE OR RADG6G/DRN,DCN,DC
                RE OR RADG6H/DRN,DCN,DCRE OR RADG6I/DRN,DCN,DCRE OR RADG65/DRN,
                DCN,DCRE OR RADG8I/DRN,DCN,DCRE OR RADG8J/DRN,DCN,DCRE OR
                RADG8K/DRN,DCN,DCRE OR RADG8L/DRN,DCN,DCRE OR RAHAPT/DRN,DCN,DC
                RE OR RAO4BT/DRN,DCN,DCRE OR RA0QG8/DRN,DCN,DCRE OR RA15QA/DRN,
                DCN,DCRE OR RA15Q5/DRN,DCN,DCRE OR RA3VXN/DRN,DCN,DCRE OR
                RA7O3A/DRN,DCN,DCRE OR RA7O39/DRN,DCN,DCRE OR RA9DK1/DRN,DCN,DC
                RE OR RA9Q8U/DRN,DCN,DCRE OR R09026/DRN,DCN,DCRE OR R09910/DRN,
                DCN,DCRE OR R14043/DRN,DCN,DCRE OR R14047/DRN,DCN,DCRE OR
                132090-0-0-0/DRN,DCN,DCRE OR 1371912-0-0-0/DRN,DCN,DCRE OR
                235201-0-0-0/DRN,DCN,DCRE OR 235201-1-0-0/DRN,DCN,DCRE OR
                255484-0-0-0/DRN,DCN,DCRE OR 255489-0-0-0/DRN,DCN,DCRE OR
                387801-0-0-0/DRN,DCN,DCRE OR 655388-0-0-0/DRN,DCN,DCRE OR
                672906-0-0-0/DRN,DCN,DCRE OR 751091-0-0-0/DRN,DCN,DCRE OR
                77706-1-0-0/DRN,DCN,DCRE OR 77706-2-0-0/DRN,DCN,DCRE OR
                791464-1-0-0/DRN,DCN,DCRE OR 862729-0-0-0/DRN,DCN,DCRE OR
                862730-0-0-0/DRN,DCN,DCRE OR 862731-0-0-0/DRN,DCN,DCRE OR
                862732-0-0-0/DRN,DCN,DCRE OR 863331-0-0-0/DRN,DCN,DCRE OR
                92747-0-0-0/DRN,DCN,DCRE OR 92747-0-1-0/DRN,DCN,DCRE OR
                92747-0-2-0/DRN,DCN,DCRE OR 92747-0-3-0/DRN,DCN,DCRE OR
                92747-0-4-0/DRN,DCN,DCRE OR 92747-1-0-0/DRN,DCN,DCRE OR
                92747-2-0-0/DRN,DCN,DCRE)
L84          94 SEA ABB=ON  (L82 OR L83)
                D TRIAL 1-5
L85        2997 SEA ABB=ON  BACTERIOSTAT?/BI,ABEX
L86       31135 SEA ABB=ON  MICROBICID?/BI,ABEX OR ANTIMICROB?/BI,ABEX
L87       59114 SEA ABB=ON  ANTIBACTERI?/BI,ABEX OR BACTERICID?/BI,ABEX
L88           6 SEA ABB=ON  L84 AND (L85 OR L86 OR L87)
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                D TRIAL 1-6

     FILE 'WPIX' ENTERED AT 10:27:24 ON 28 FEB 2007
                D QUE NOS L88

     FILE 'CAPLUS, BIOSIS, WPIX' ENTERED AT 10:27:37 ON 28 FEB 2007
L89           39 DUP REM L76 L78 L88 (2 DUPLICATES REMOVED)
                     ANSWERS '1-27' FROM FILE CAPLUS
                     ANSWERS '28-35' FROM FILE BIOSIS
                     ANSWERS '36-39' FROM FILE WPIX
                D IBIB ED ABS HITSTR 1-27
                D IALL 28-35
                D IALL ABEQ TECH HIT HITSTR 36-39

     FILE 'HOME' ENTERED AT 10:28:36 ON 28 FEB 2007

     FILE 'REGISTRY' ENTERED AT 10:29:53 ON 28 FEB 2007
L90            2 SEA ABB=ON  4289-98-9 OR   583-91-5
                D IDE 1-2
                D STAT QUE L59

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